

NVS Center

User's Manual

(for WindowsXP/2003/Win7/Vista)

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Read this manual carefully before installation and keep it by hand for future reference.

Statement

Contents in this manual may be different from the edition that you are using. Should any unsolved problem occur given that the product is used according to this manual, please contact our technical support department or your product suppliers.

The content of this manual may be updated at irregular intervals without prior notice.

Readship

This manual is suitable for engineers as follow:

- System planning person
- Support and maintenance person
- Administrator
- User

Notes

- “NVS” mentioned in this manual refers to front-end device (network camera or network video server).
- Device, encoder, front-end device mentioned in this manual refers to front-end encoder device (network camera or network video server).
- Click: Press the left mouse button once.
- Double-click: Press the left mouse button twice.
- “[]”: Window name, menu name and datasheet.
- DVS: Digital Video Server

NVS: Network Video Server

IPC/IP Camera: Network Camera

1 Overview

Software Overview

Central Management Software is designed to realize integrated surveillance, storage, management and control of all front-end equipments (including Digital Video Server, Digital Storage Video Server, IP Camera, etc.). This management software can manage up to 1728 front-end network surveillance devices at the same time, performing setup, control and remote upgrade functions to any of the equipments. It supports 1/4/9/16/25/36 displays in one screen, two-way intercom, electronic map, log retrieval, alarm controlling, long-distance retrieval and playback. Powerful function, friendly interface, simple operation, all of them provides great advantages for users to realize networking application of large-scale and long-distance network surveillance.

Main Functions of the Software

- Manage 1728 channels of audio and video simultaneously (48 groups)
- Central Management Software can manage all front-end equipments (including DVS, IP Camera and so on) to realize integrated surveillance, storage, management and control.
- Electronic- map function
- Image Preview, Surveillance alternation
- Audio volume can be manually adjusted
- Audio talkback and broadcast
- Image recording (pre-recording, manual recording, alarm linkage recording and record schedule)
- Retrieval and playback of records according to channel and date
- PTZ control (Support over 40 kinds of decoder protocols), Preset, Recall, Track Recall.
- Supports the recalling of preset position by linkage alarm.
- Supports video loss, video motion, abnormal network interruption and front-end detector triggered alarm.
- Log management (Supports system operation records and alarm records query)
- Front-end & back-end snapping
- Passive Connection Mode (DVS Active Connection Mode)

2 Install Software

Getting software

Put the companion CD in the package of IP camera or DVS into the CD driver, find "NVS Center" setup file from central management software catalog, copy it to your PC, double click it to run installation. After the installation completes, find Search NVS software via below path: "Start Menu" → "All Programs" → NVS Center

Software Running Environment



Operation system

32-bit and 64-bit Simplified Chinese & English editions of Windows2000, Windows2003, WindowsXP, Win7, Windows Vista, etc.



Recommended configuration of hardware environment

- CPU: Pentium 2.6Mhz
- System Memory:512MB
- Graphics Card:Nvidia Geforce FX5200 or ATI RADEON 7000(9000) series 128M Display Card Memory (Graphics Card needs to be hardware scaling supportive)
- Sound Card: necessary for audio surveillance and talkback
- Hard Disk: minimum 40G capacity required for image recording.



Software Environment

- DirectX8.0 version or above
- TCP / IP



Definition supported

Adaptive resolution equal or greater than 1024*768



System Requirement

The PC installed with this software requires a graphics card that supports the color change and zoom of image, now the graphics card that has been tested are: Nvidia Tnt/Tnt2、Geforce Mx200/400/420/440 Fx5200/5600 series, ATI Radeon 7000/7200/7500/8500/9000/9200/9500/9600 series, and

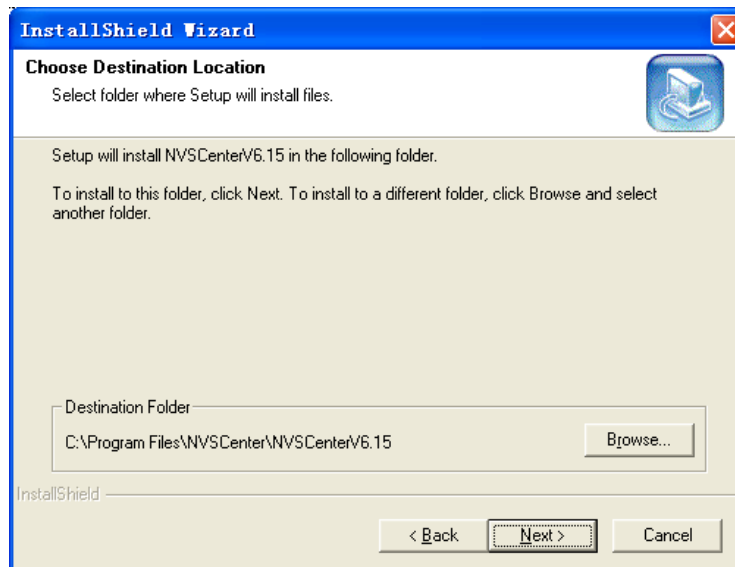
Install Software

MatroxG450/550 and INTEL845G/865 G series. Please note that the graphics card driver must be hardware scaling supportive.

Software Installation

Find the setup file of digital surveillance central management software named NVSCenter.exe and double-click it, a window appears as follow:

Figure 1 Install Interface



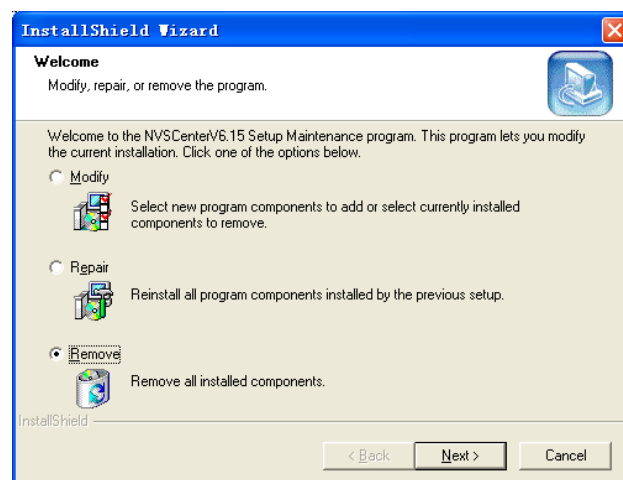
Follow the instruction, click "Next" icon until "Finish" icon appears, and then click "Finish" to complete installation. The default path of the software is C:\Program Files\NVS Center\NVS Center Vn.nn.

Uninstall Software

There are two ways to uninstall the software at user's end:

- "Start" → "Programme" → "NVS Center" → "Uninstall".
- Open "Control Panel", choose "Add/Del Programme", and delete "NVSCenter" from the programme list.

Figure 2 Uninstall Interface



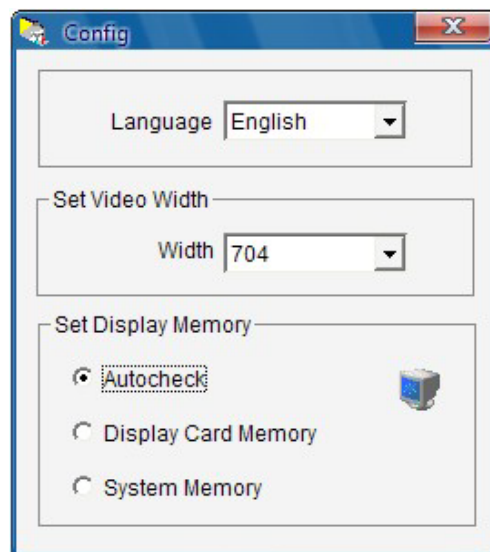
3 Operation of NVS Center

Software Configuration

Change the software's language to Chinese/Russian/Italy/French/Polish.

Click start→program→NVS Center→config; Run "Config.exe" will pop up the configuration window as Figure 3, choose one language you want and click "确定", then close the window.

Figure 3



Having finished software installation, some DVSs may not be able to display normally sometimes for the differences between graphics cards, then you should set the following parameters of display buffer: auto-detection, used display card memory, system memory and video width. The software supports Chinese/English, run Simplified Chinese or English edition.

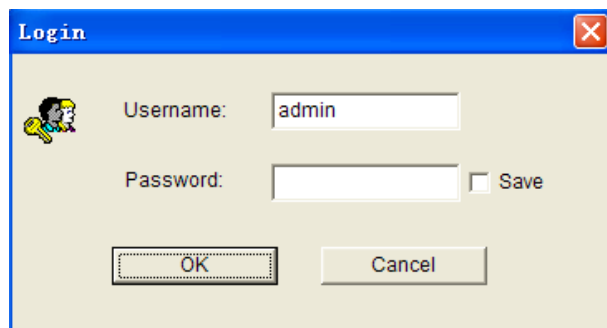
Login

Click  to start the program, the initial user name is admin and password is blank.

System detects that the password of the administrator "admin" is blank as the program starts, the main interface appears (See Picture 6). The password can be changed via this route: Local Setting→Common Setting→Local User Administration.

If a password has been set for “admin”, user login window will pop up when running “NVSCenter.exe”:

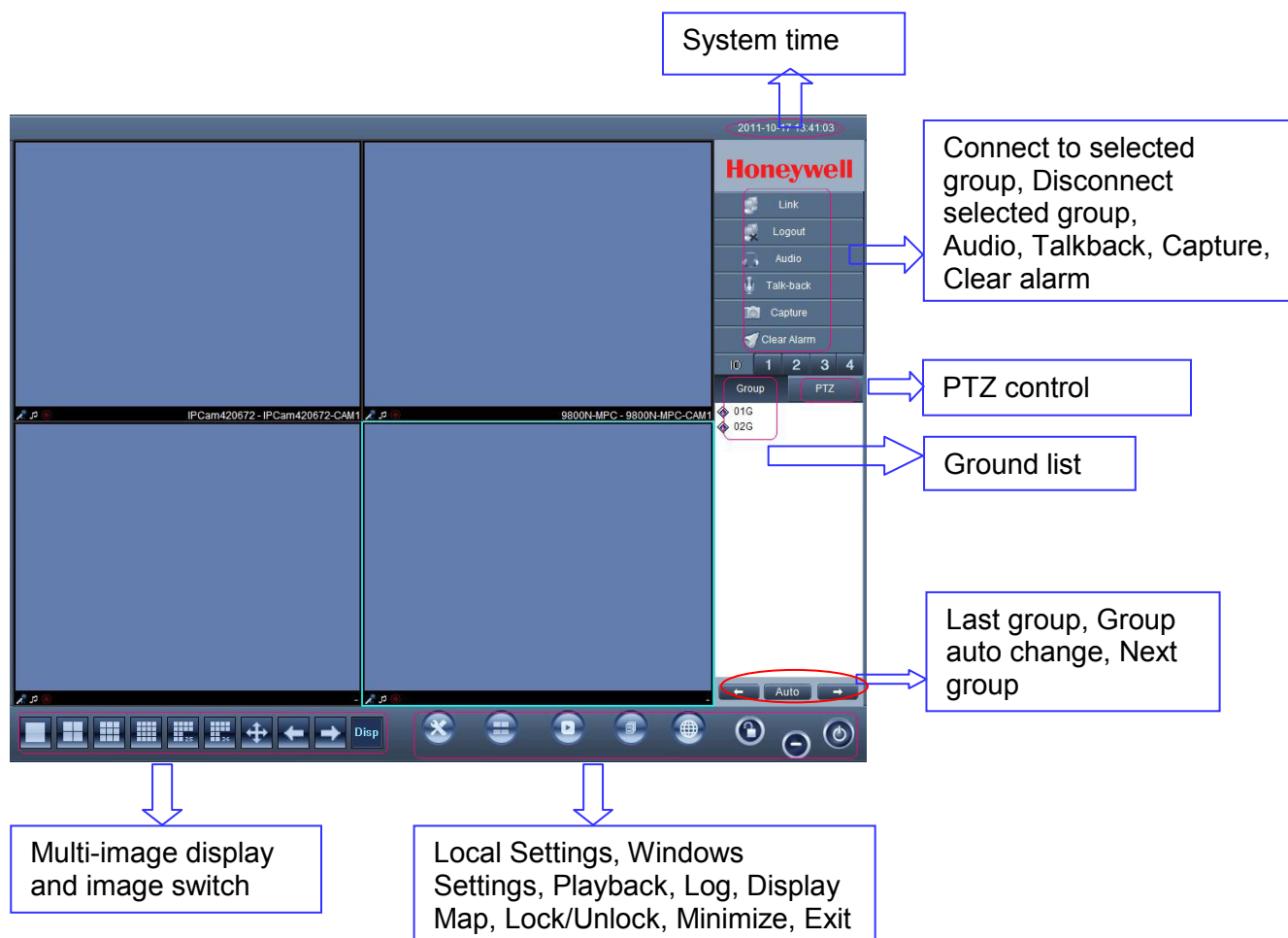
Figure 4 Login window



Enter user name and password into the login window; click [OK], the main interface of NVSCenter appears as Figure 6.3.3 Software main interface and function.

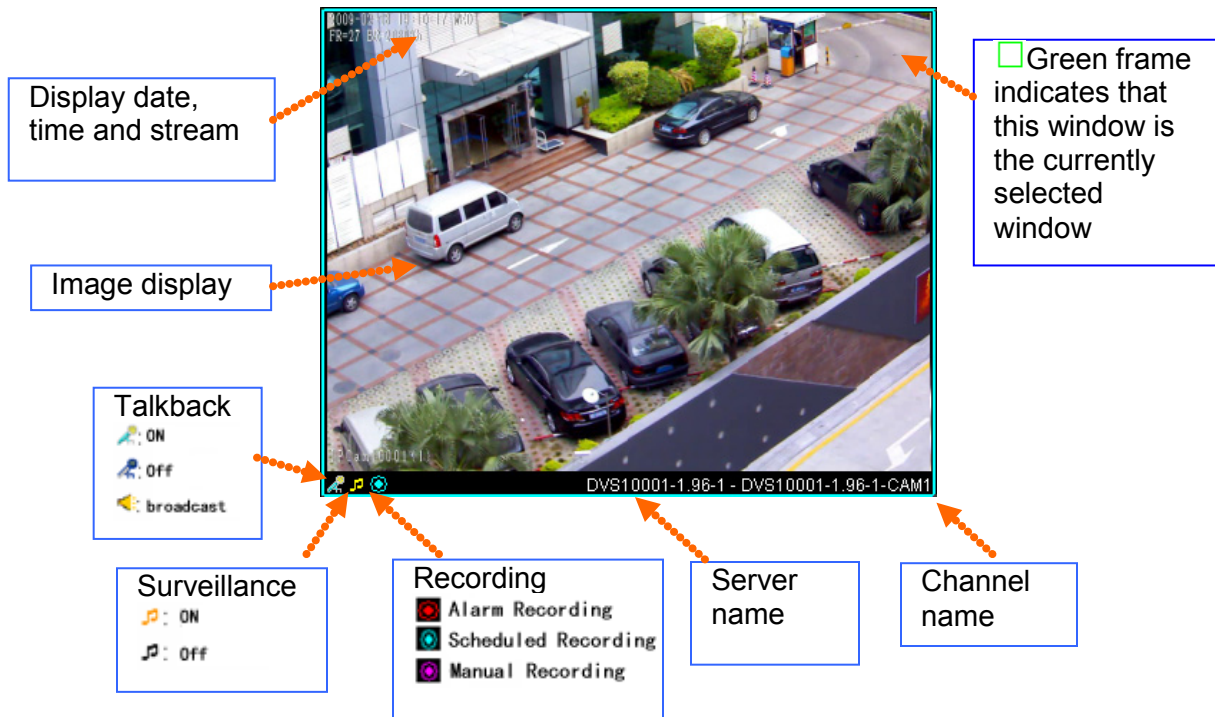
Main Interface

Figure 5 Main Interface



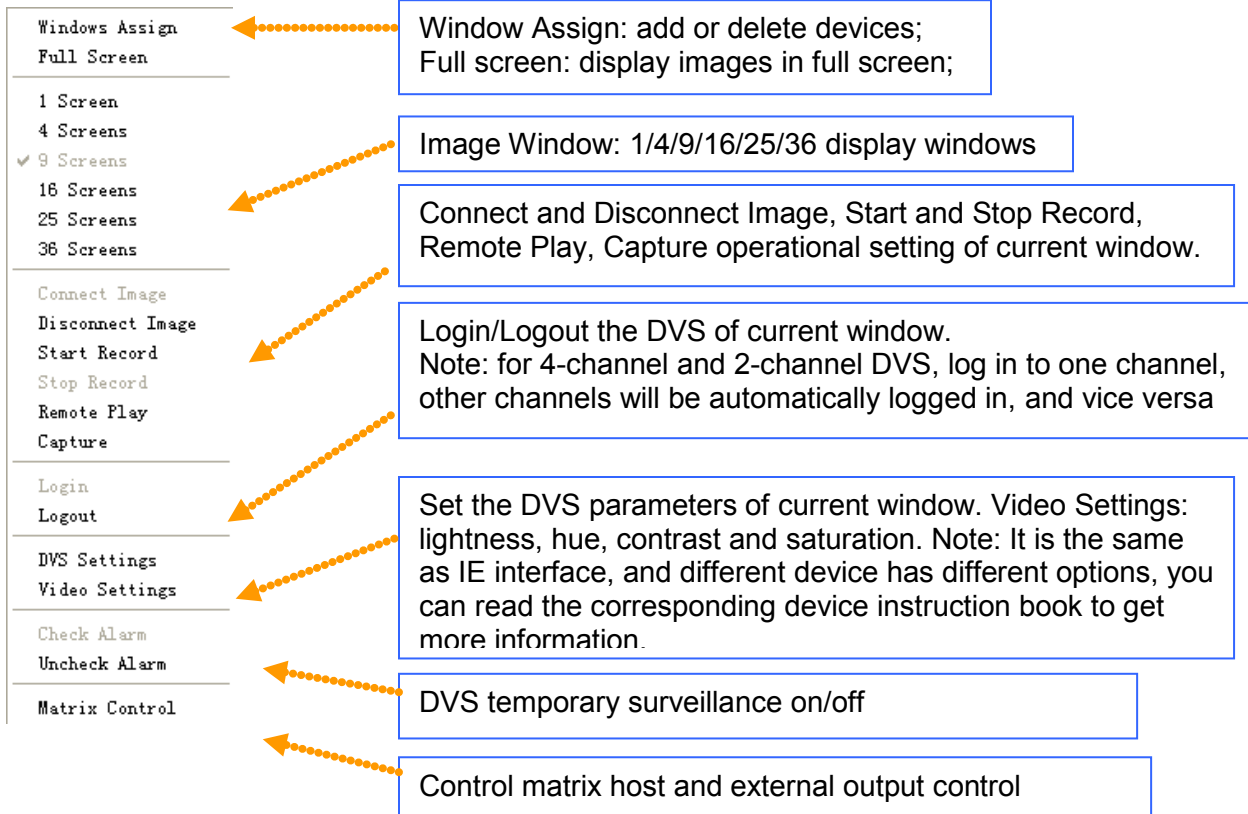
Operation of NVS Center

Image Display Window

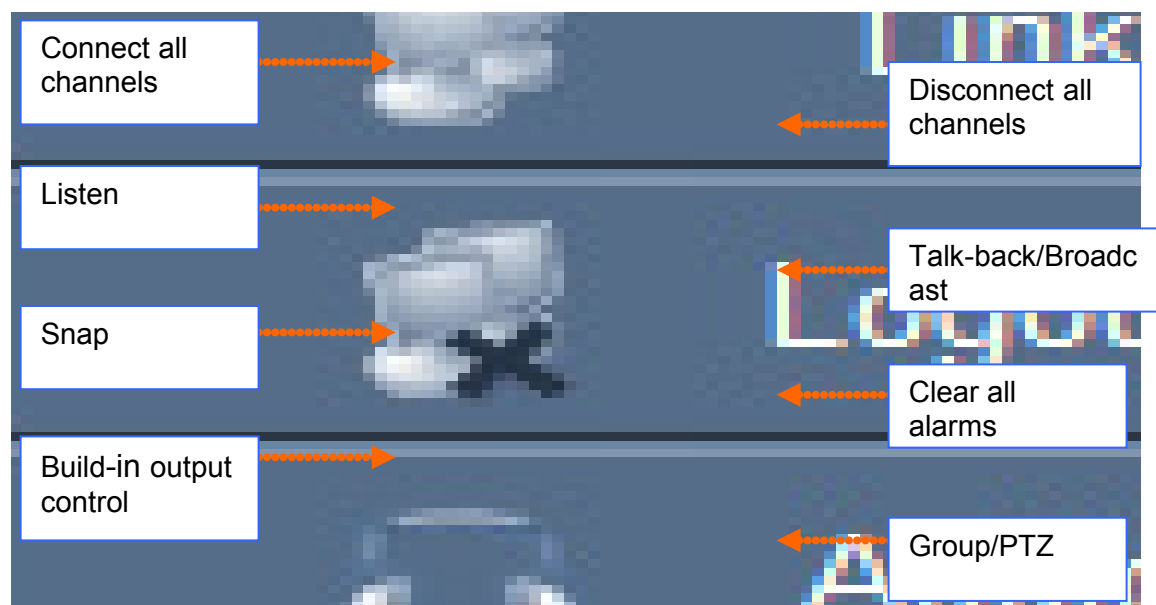


Double-click display window, the selected window will be magnified. Double-click again to return to normal mode.

Right click display window, a menu appears as follow (the modes of menus can be different as the mode of windows varies):



DVS Operation Button



Audio Surveillance and snap are for operations to currently selected window, DVS Parameter, Talkback; Clear Alarm is for operations to the corresponding NVS of currently selected window. Click "Clear Alarm" will clear all linkage alarms of the corresponding NVS of current selected window.

Talkback/Broadcast

A window appears as follow after click  icon:

The screenshot shows the "Talkback & Broadcast" window. It contains the following sections:

- System include Device:**
 - Group ID: 01
 - Group name: [empty]
 - Table with columns: Server Name, URL, Port. Data row: DVS10001, 192.168.33.23, 5000.
- Talk-back Device:**
 - Field: DVS10001 192.168.33.23 5000
 - Button: Talkback
- Broadcast include Device:**
 - Sampling Rate: 32000
 - Buttons: Broadcast, Add Device >>, Add group >>, Add all >>, Delete Device, Delete all
 - Table with columns: Server Name, URL, Port.

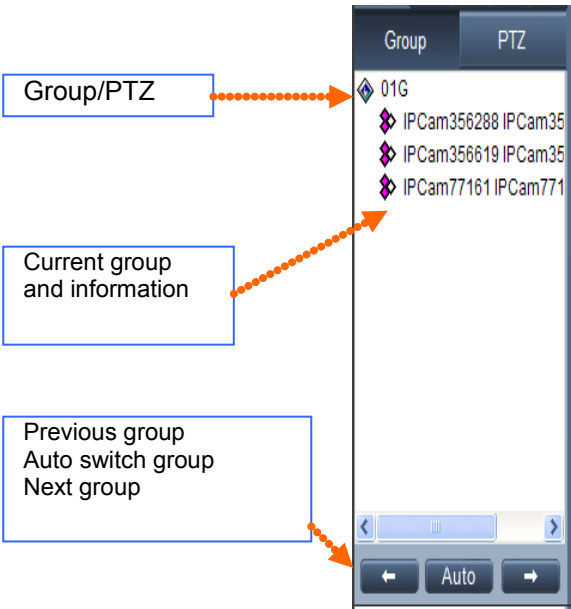
You can select DVS then perform talkback or select multi-DVS to start broadcasting.

Output Control

Each video server has four relay outputs, they can be enabled when alarm is triggered in a linkage alarm setting; you can also open or close them manually via the function buttons provided in the main interface (see below picture).



Grouping Operation

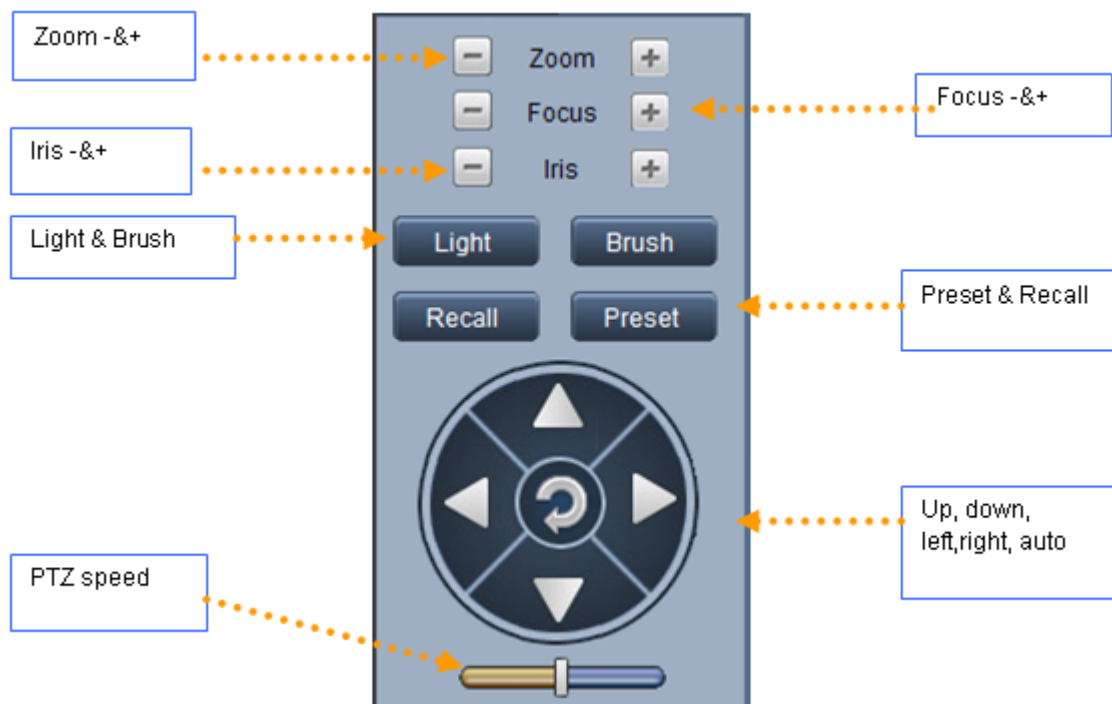


Right click “01G” a menu pops up (see image on the right): group connection, disconnection, login, logout, recording can be performed.

Right click “IPCam356288” to operate IPC

- Windows Assign
- Connect Group Image
- Disconnect Group Image
- Start Group Record
- Stop Group Record
- Group Login
- Group Logout
- Windows Assign
- Connect Image
- Disconnect Image
- Start Record
- Stop Record
- Login
- Logout
- Device Settings

Front-end Control



Set and recall preset position

Set preset position

Select correct channel and press **Preset** button, a window pops up as follow:

The 'Preset' dialog box contains the following fields and buttons:

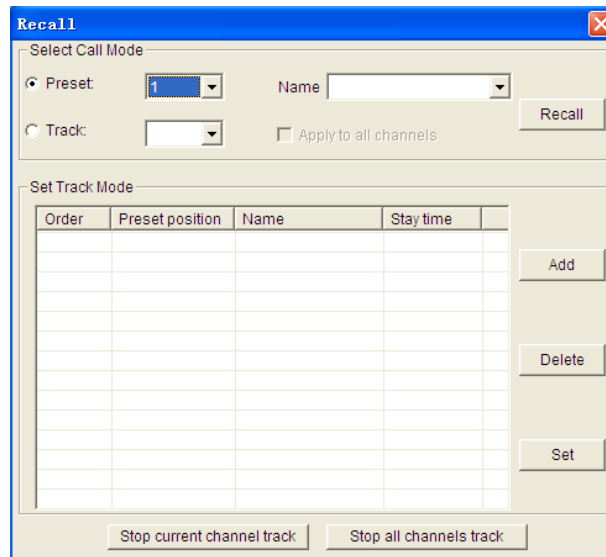
- Preset position:** A dropdown menu showing '1'.
- Name:** A text input field.
- OK:** A button to confirm the preset.
- Cancel:** A button to cancel the preset.

Choose the preset point and set its name, press **OK**.

Recall preset position

Press **Recall** button, a window pops up as follow:

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The Recall dialog box is used to select a call mode and set track mode. It features a 'Select Call Mode' section with 'Preset' and 'Track' radio buttons. The 'Preset' mode includes a dropdown for preset number (currently '1') and a 'Name' dropdown. The 'Track' mode includes a dropdown for track number and an 'Apply to all channels' checkbox. A 'Recall' button is present. The 'Set Track Mode' section contains a table with columns: Order, Preset position, Name, and Stay time. The table is currently empty. To the right of the table are 'Add', 'Delete', and 'Set' buttons. At the bottom are 'Stop current channel track' and 'Stop all channels track' buttons.

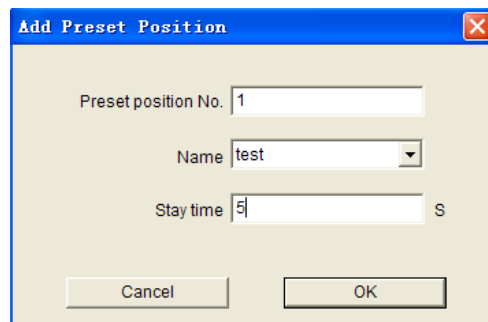
Order	Preset position	Name	Stay time
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Recall mode:

1. **Recall by preset point:** choose preset point number or its name, press [OK], the preset scene can be recalled.
2. **Recall by track mode:** Choose the serial No. of track, press [OK]

Set Track Mode:

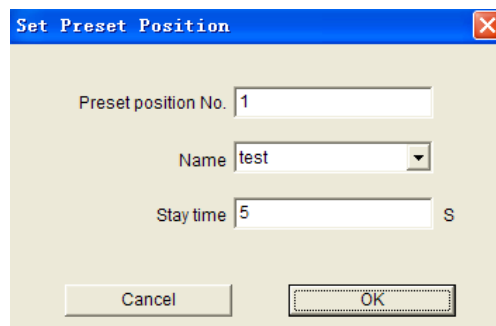
1. Choose the serial No. of the track, press "Add" button. See the following picture:



The Add Preset Position dialog box is used to add a new preset position to the track. It contains fields for 'Preset position No.' (currently '1'), 'Name' (currently 'test'), and 'Stay time' (currently '5' with a unit 's'). There are 'Cancel' and 'OK' buttons at the bottom.

Add the preset position of the track, set stay duration of the preset position (1~120000s).Then press [OK]

2. Choose the serial No. and preset position of the track, press "Add" button. See the following picture:



The Set Preset Position dialog box is used to set the preset position for a track. It contains fields for 'Preset position No.' (currently '1'), 'Name' (currently 'test'), and 'Stay time' (currently '5' with a unit 's'). There are 'Cancel' and 'OK' buttons at the bottom.

Fill in preset point or choose its name, set stay duration (1~120000s).Then press [OK]

3. Choose the serial No. and preset position of the track, press “Delete” button to delete the preset position.



- If the device of PTZ control is high speed megapixel dome, the operation of preset and recall point can be done in dome control;
- The function of dome control is the same as IE interface's, you can read the corresponding instruction book to get more details.

Image Display Control

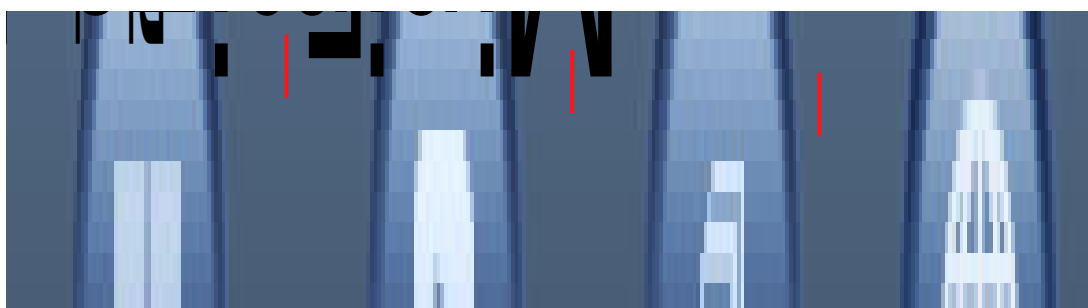


[Page Up and Page Down]: is for the scrolling display of current page (invalid for 36 Image Mode).

[Image Window Style]: click this button to display or hide the status bar in the image display window.

[Image Display Switch]: this button controls the display of images on the screen, it is usually used when the CPU configuration is low and PC decoding cannot meet requirement or on the condition that only recording is needed.

Function Buttons

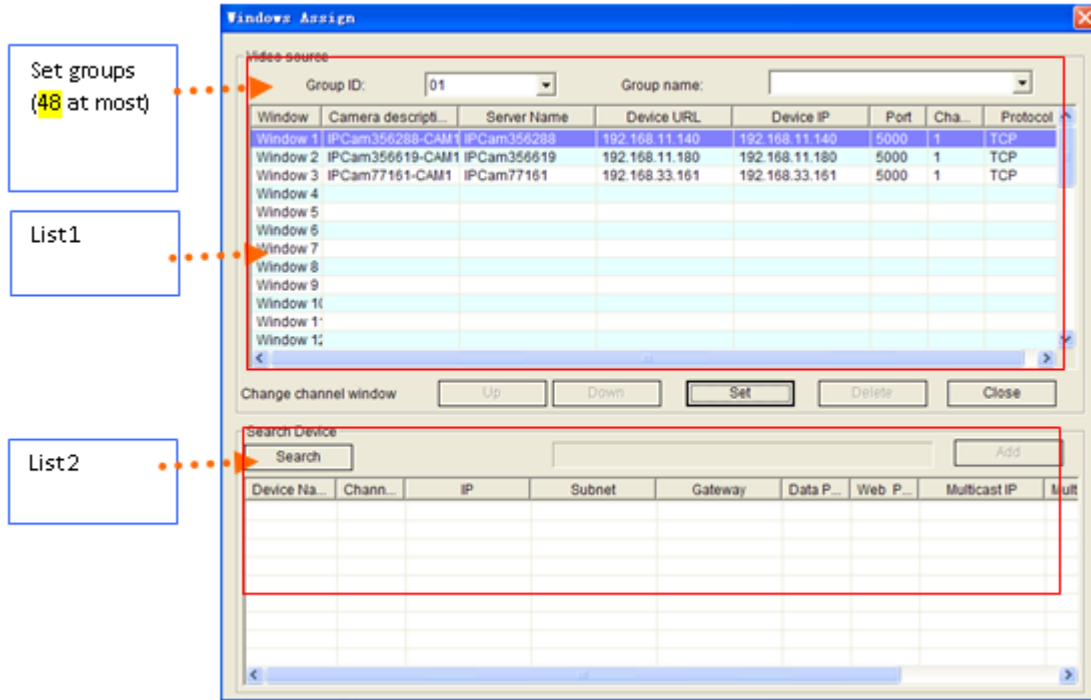


Windows Assign

Right click on the image window and select [Windows Assign] or click [Windows Assign]

icon , a window appears as follow:

Operation of NVS Center



[Search]: Click this icon, it search out all of the DVSs and corresponding information on the network and display them in list 2.

[Add]: Click this icon to add DVS in list 2 to list 1.

Select one entry from list 2, click “Add” or double click it to add it into list 1.

In list 2 indicates all channels of the DVS are added, indicates only some channels of the DVS are added, white color indicates no channel is added.

[Sequencing]: click at the header of list 2 to sort the entries in ascending or descending order. To sort by “DVS Name”, click the “DVS Name” header.

The following functions: “Up”, “Down”, “Delete” and “Setup” are for the operation of the channels selected in list 1. “Up” and “Down” can change the number of the window that is linked with DVS channels.

[Down]: Decrease the number of DVS channel window. This function is disabled when the selected DVS channel is linked to its adjacent channels.

[Up]: increase the number of DVS channel window. This function is disabled when the selected DVS channel is linked to its adjacent channels.

[Delete]: This function is disabled when the selected DVS channel is connected or logged in.

[Set]: Pitch on the window to be set, double click or click “Set” button, the window setting interface will pop up as follow:

[DVS Users]: The DVS users that are connected.

[Login Password]: The password of the connected DVS.

[Server's Name]: The name of the DVS connected, it is a unique identifier in the same domain, which is to be the identifying mark when transmitting data. Repetition should be avoided while setting it up. For different channel window in one DVS, server's Name, login user's name and password ought to be completely the same.

[Server's URL]: IP address or domain of the DVS connected.

[Server Port]: Data port of the DVS connected, default value is 5000.

[Communication Mode]: Network communication protocol - TCP, UDP or Multicast.

[Channel Number]: It is to show which channel is connected to current window. Channel number begins from 1, for four- channel DVS, the number is from 1~4.

[Camera Description]: Description of the camera connected to DVS channels, which is displayed in the status bar. It can be input by users.

[Encoder Stream]: Set liveview encoder stream.

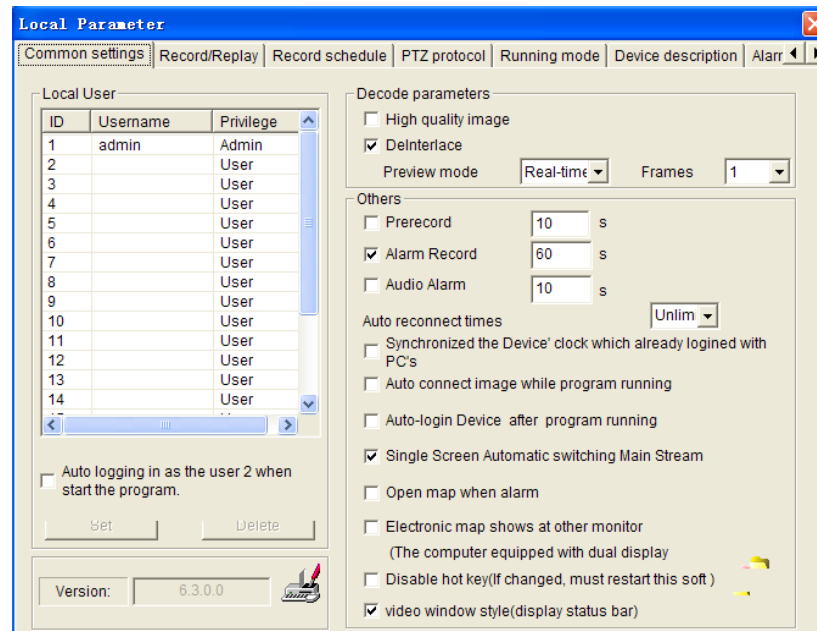
[Recode Stream]: Set recode stream.



- For different windows on one DVS, the server name should be different, while user's name and password should be the same.
- Above information cannot be changed if video has been connected or channel has been logged in.

Local Settings

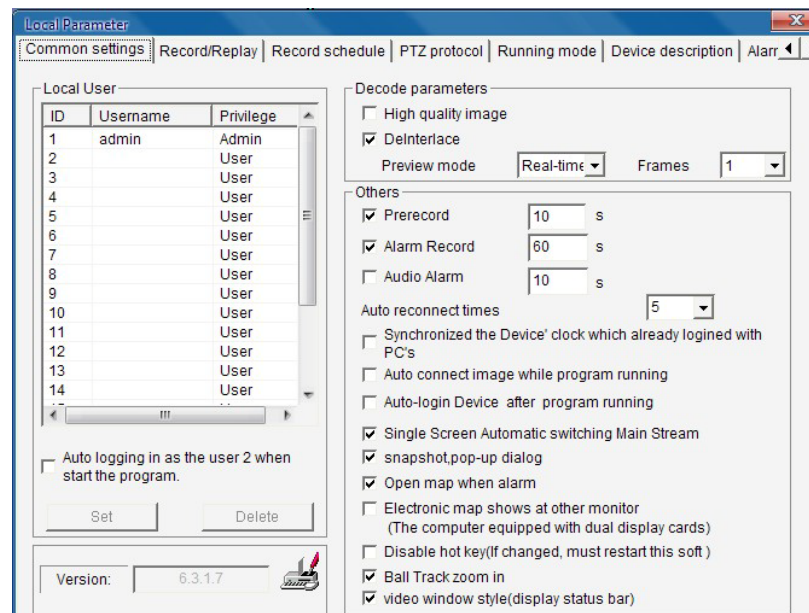
Click on the “Local settings” button , the local settings interface will pop up as follow:



There are ten functions in this interface, which are [Common Settings], [Record/Replay], [Record Schedule], [PTZ Protocol], [Running Mode], [Device Description], [Alarm Settings], [Multi-homed host], [PTZ Key], [FTP Server],[Map setting].

Common Settings

See below picture for the interface of “Common Settings”:



[Local User Manager]: Set the users of this software, altogether there are 20 operation users, the first one is administrator and others are operators.



- Administrator has the ownership right
- Administrator can change the operator's permission of function node, add or delete operators. But it can't change the user name and password of operators. Operators can only change user name and password of its own.
- If "Auto log in system as user 2" is checked, system starts with operator 2 logged in.

[High-quality Image Display]: enable or disable high quality image display (for post-processing of images), occupies much CPU space;

[Deinterlacing]: CPU processes the image by clearing the interlace.

[Select Preview Mode]: Real-time Priority: no buffering; Fluency Priority: buffering improves fluency. Frame Buffer: set buffer frame rate.

[Start Pre-Record]: Enable or disable alarm pre-recording and duration of pre-recording.

[Start Alarm Recording]: Enable or disable local PC alarm recording and duration of alarm recording.

[Start Audio Alarm]: Enable or disable audio alarm and the duration of audio alarm. When there is alarm, the PC audio card will output alarm sound (it can be set in "Alarm Settings").

[Auto-connection Times]: Enable or disable auto-connection, set times of auto-connection when images are blocked abruptly.

[Synchronized the Device' clock which already logined with PC's]: Make the Device' clock Synchronized with PC's which already logined

[Auto-connecting image after program starts]: When the program starts, whether it connects the image groups automatically or not.

[Auto login Device after program starts]: When the program starts, whether it logs in the DVS groups automatically or not.

[Single Screen Automatic switching Main stream]: Single Screen Automatic switching Main stream, multi- screen Automatic switching alternate stream.

[Snapshot, pop-up dialog]: Enable or disable reminder window pop-up when snapping;

[Open map when alarm]: Enable or disable E-map pop-up when alarming;

[Electronic E-map shows at another monitor]: To display E-map on another monitor or not, this function requires dual graphics cards;

[Disable hotkey]: Shortcut keys for screening programs, this parameter can only take effect after restarting the software;

[Ball track zoom in]: Enable or disable dome camera track zoom in.

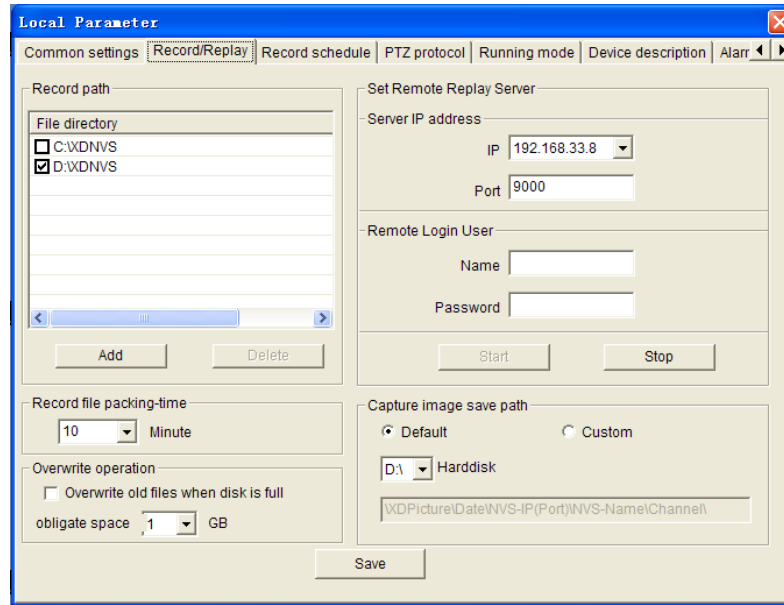
[Video windows style]: Display status bar or not.

[Version]: Display the Version of the current NVSCenter software.

Record/Replay

See below picture for the interface of "Record Storage Settings":

Operation of NVS Center



[Set record storage directory]: The full path of record storage is: User Specified Directory\Record Date\DVS IP Address_DVS Name\DVS Channel\

[Add]: Add "User Specified Directory" to "Directory List".

[Delete]: Delete "User Specified Directory" from the "Directory" list, if there are record files under the directory, it cannot be deleted.

[√]: It will take effect after being checked. Only one user specified directory under one disk partition can be checked.

[Record files packing interval]: Set the packing interval of files in minutes.

[Overwrite operation]: Enable or disable old file auto-deletion function. The clear function will be started to delete the files in home directory when the remain space less than the obligate space plus 6G. First delete the files of the earliest date, if the space is less than "obligate space"*2 plus 6G, then delete the files of the earliest date but one, then go on like this if necessary. If the record files are taken on the current date, then first delete the files of the earliest hour. But files of the current hour cannot be deleted, if the disk gets full in one hour, the device will stop recording and snapping. After the one-hour session ends, system will delete the files of the hour and continue to record and snap. Obligate space default and recommended is 1G.

[Playback server address]: Setting image playback server address and port. After modifying the IP address or Port, click [Save] and restart the server.

[Telnet user]: User and password can be empty. After modifying the IP address or Port, click [Save] each time. No need to restart server.

[Snapped image save to]: Images including captured images from DVS front-end and manually captured images at NVSCenter. There are two kinds of snapped image storage path:

1. [Default]: User specified directory\XDPicture\Date\DVS IP address_DVS name\DVS channel\
2. User-defined storage path.

Record Schedule

See below picture for the interface of "Record Schedule Settings":

Local Parameter

Common settings | Record/Replay | Record schedule | PTZ protocol | Running mode | Device description | Alarm

Select channel

☐ All Device Channel

Channel	Camera title	Server name	Address	Port
1	IPCam356288-CAM1	IPCam356288	192.168.11.140	5000
1	IPCam356619-CAM1	IPCam356619	192.168.11.180	5000
1	IPCam77161-CAM1	IPCam77161	192.168.33.161	5000

Time Settings

☐ Enable schedule record

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Everyday																								
Sun.																								
Mon.																								
Tue.																								
Wed.																								
Thu.																								

Record time from 00 To 59 M

Save

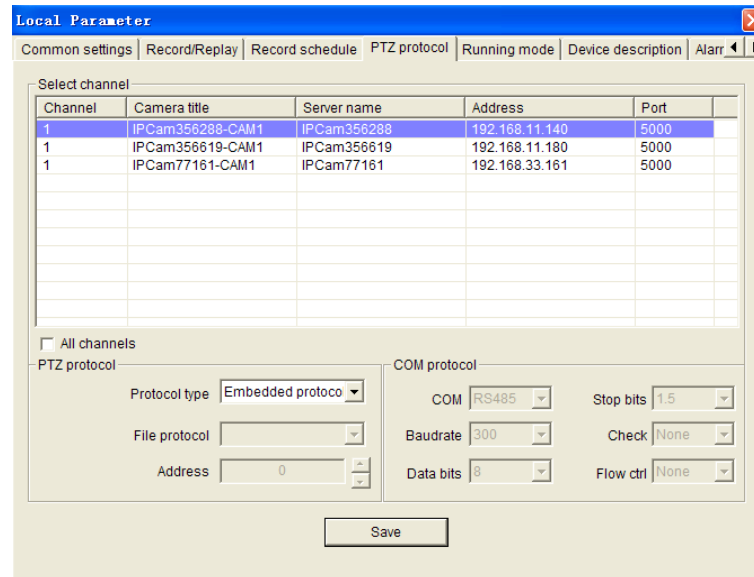
Record Schedule setting is to set the recording time for every window, whether it is necessary to record each hour in every 24 hours. To record, select [R]. If [Same record schedule for all DVS channels] is selected, then the record schedule of every channel is the same.

[Start record schedule]: enable or disable record schedule. Only when this option is enabled, the channel record schedule can be effective.



color means record schedule has been set for the channel

PTZ Protocol



Local Parameter

Common settings | Record/Replay | Record schedule | **PTZ protocol** | Running mode | Device description | Alarm

Select channel

Channel	Camera title	Server name	Address	Port
1	IPCam356288-CAM1	IPCam356288	192.168.11.140	5000
1	IPCam356619-CAM1	IPCam356619	192.168.11.180	5000
1	IPCam77161-CAM1	IPCam77161	192.168.33.161	5000

☐ All channels

PTZ protocol

Protocol type: Embedded protocol

File protocol:

Address: 0

COM protocol

COM: RS485

Baudrate: 300

Data bits: 8

Stop bits: 1.5

Check: None

Flow ctrl: None

Save

To control the corresponding front device of the selected window, its corresponding decoder type must be set up first. The default DVS built-in decoder protocol is adopted (built-in protocol can be downloaded from the front-end setting of the DVS setting and saved into the DVS system).

If transparent protocol is adopted, please choose the PTZ protocol file, PTZ address and baud rate corresponded with current channel.



Only when the protocol, address, baud rate of Decoder corresponds to that of the PTZ entirely, can control be realized.

Running Mode

See below picture for the interface of "Running Mode":

The screenshot shows a software window titled 'Local Parameter' with a tabbed interface. The 'Running mode' tab is active. Under 'Running mode select', 'Positive mode' is selected with a radio button. Below this, the 'Parameters of passive connection mode' section contains several input fields: 'Server port' is set to 7900, 'Verify Device User' is an unchecked checkbox, 'Device User Name' is set to Admin, and 'Device User Password' is masked with asterisks. A 'Save' button is located at the bottom of the window.

[Active Connection Mode]: The surveillance central actively searches for or manually adds DVS network information.

[Passive Connection Mode]: DVS actively register network information into surveillance central.

The usage of the two modes:

[Active Connection Mode] applies to most network.

[Passive Connection Mode] applies to wireless network or single small surveillance network. For example: DVS transmits data via CDMA and GPRS. When users adopts active mode to connect mobile IP, the GPRS/CDMA gateway refuses or restricts outside visiting, so Passive Connection Mode must be adopted at this time to transmit network information and data to surveillance center.

When surveillance center adopts Passive Connection Mode, please set its service port to determine whether to validate DVS user or not. Besides, the settings of front-end DVS that is connected to the center must be in line with the above to ensure successful registration. Please refer to [\[Set DVS network parameters\]](#) for DVS settings.

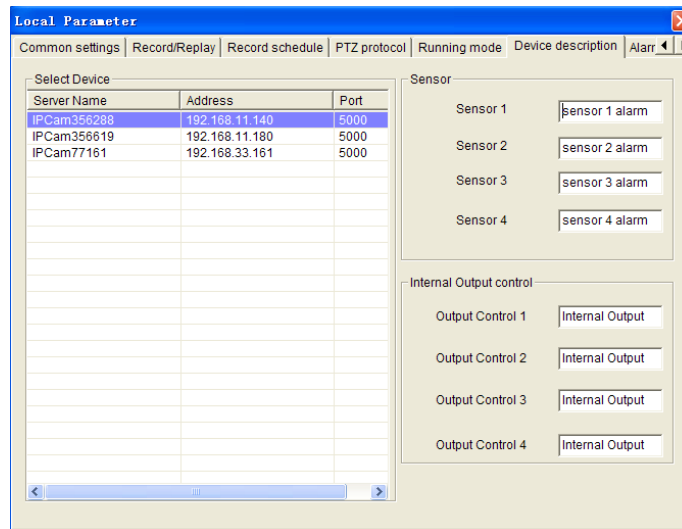


The software needs to be restarted after changing its connection mode.

Device Description

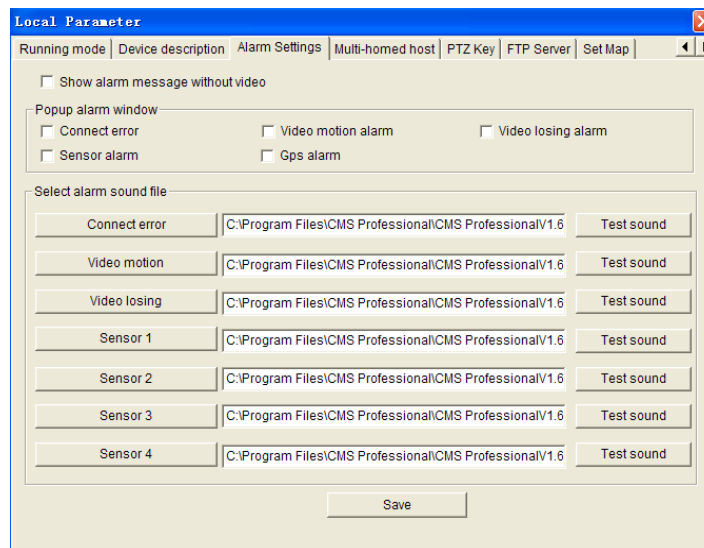
See below picture for the interface of "Device Description":

Operation of NVS Center



This setting names every front-end device of NVS (Alarm Input, Alarm Output), for example: the first sensor is named as "Infrared Sensor 1"; the second sensor is named as "Smoke Sensor 1". The first alarm output is named as "Light"; the second alarm output is named as "Warning Signal", etc.

Alarm Settings



Setting what events can trigger the alarm window. The events include network interruption, video motion alarm, video loss, front-end sensor alarm, GPS alarm and so on.

[Select Alarm Sound File]: Users can select local sound file, but the file must be in wav format. When alarm occurs, the surveillance center will make a correlative sound.

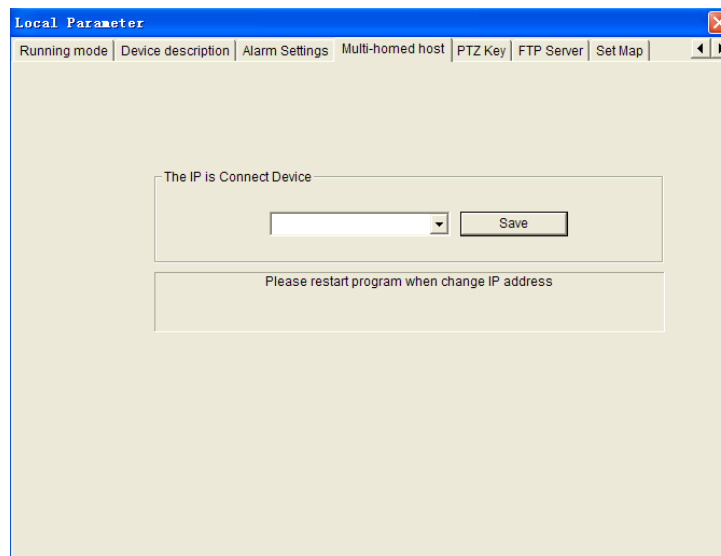
[Set the type of the Alarm Window]: If "show alarm message only in alarm window" is chosen, video and emergency control function will not be displayed in the window.



ATTENTION: Only after setting the corresponding alarm type, alarm message can be displayed when the alarm event occurs.

Multi-homed Host

See below picture for the setting interface of dual-homed/multi-homed host:



Select the IP address connecting DVS, and then click [\[Save\]](#) to make the settings valid.

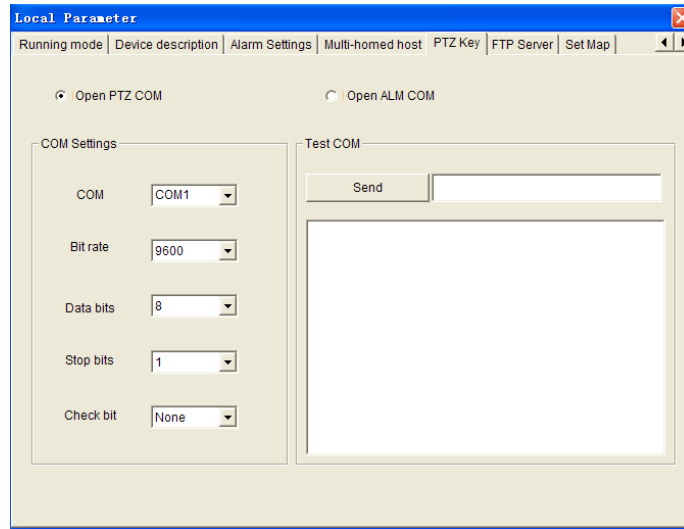


There is no need to set this parameter if the host is neither a multi-homed host nor a dual-homed host. This parameter setting is for data transmission, one NIC address is to connect DVS, and the other is to serve as transmission server address.

PTZ Key

Please see below picture for the interface of "Serial Port Control Settings":

Operation of NVS Center



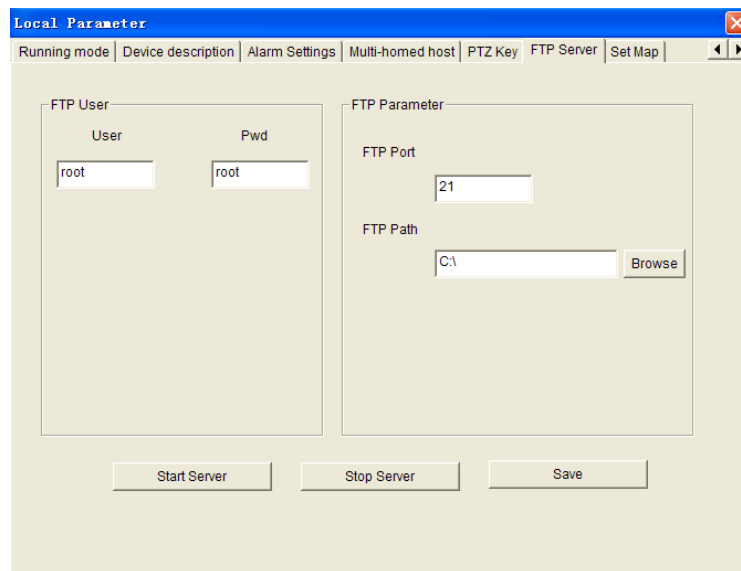
Connect keyboard to the serial port of PC, control front-end device by the serial port.

[Serial port communication parameter]: Set communication parameter for serial port.

[Serial port test]: Send data to test serial port connection.

FTP Server

See below picture for the setting interface of FTP server:



Users can upload the files obtained by scheduled snapshot, recording, alarm snapshot and recording to FTP server via starting this FTP server.

[FTP User]: Set user name and password of FTP server.

[FTP Port]: Port of FTP server, the default port is 21.

[FTP Path]: The path of FTP server, if the path does not exist, the device will create a directory automatically.

[Start Server]: Start the server function of FTP.

[Stop Server]: Close the server function of FTP.

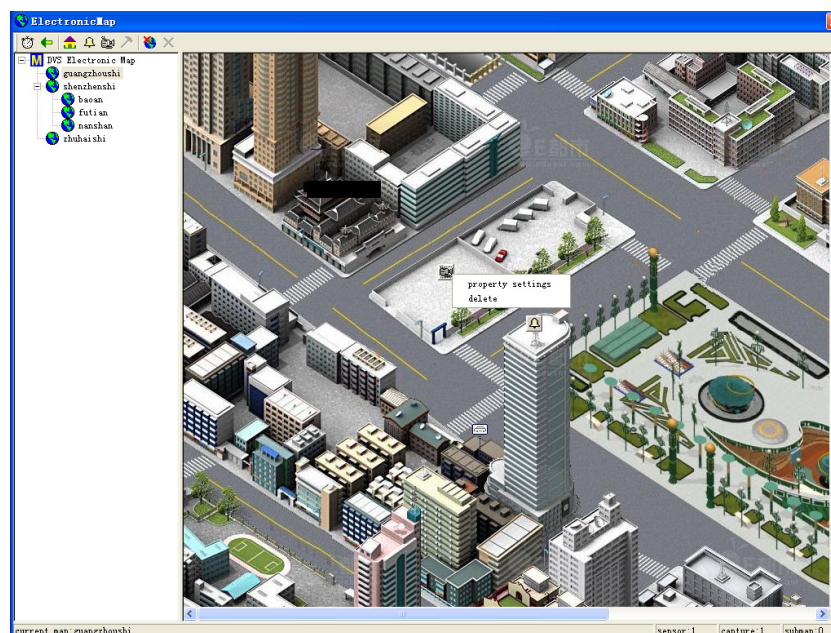
[Save Settings]: Save the FTP server parameters after alteration.

Set map

See below picture for the setting interface of [set map]:



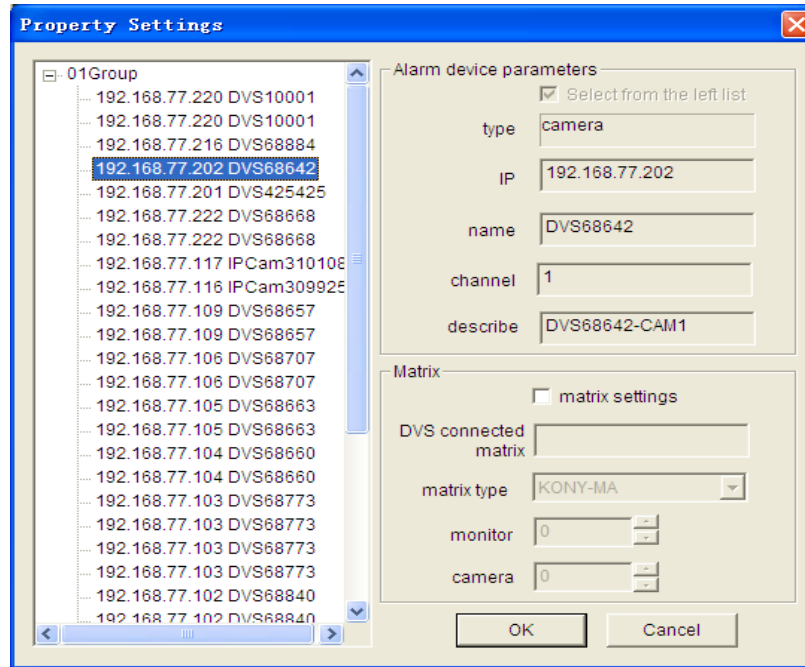
Click **Set Map** button, the E-map interface will be displayed as follow:



Mark the position of every camera and sensor on the E-map, then it will be clear at a glance. First a planar map should be built with the drawing, then right click on the list of E-map, select "add" to complete E-map adding and name it, double-click the map name to open or switch E-map.

Operation of NVS Center

Having finished adding E-map, cameras and sensors can be established in it. Switch to corresponding window by clicking the camera in the E-map. Select camera or sensor, click caption button, a window appears as below:

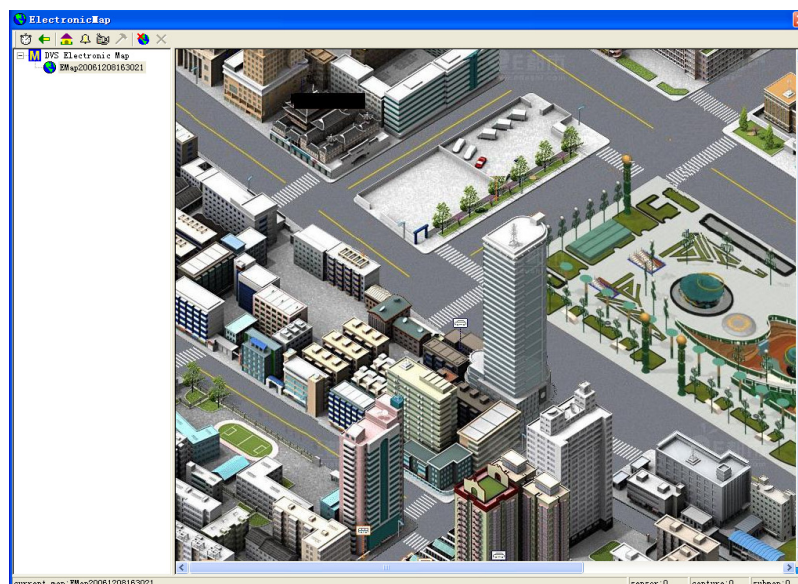


Set the serial numbers of cameras and sensors on the corresponded DVS and the name of the DVS.

After established the E-map, when there is an alarm, the E-map will pop up automatically (check the "Display E-map when alarm occurs" box in "Local Settings"), flashing of corresponding cameras or sensors indicates an alarm if cameras and sensors are marked out in the E-map.

Display Map

Click [Display map] button , the map interface will pop up as follow:



The E-map can demonstrate accurate position of each camera and sensor, it will pop up automatically when there is an alarm. If there are cameras or sensors marked on the E-map, then the flashing of the corresponding cameras or sensors indicates that an alarm occurs at the specific location.

Log Inquiry

Click [\[Log Inquiry\]](#) button , the log inquiry interface will pop up as follow:

Review Log

Search condition

Time: 2011-04-26 To: 2011-04-26 Type: Operation Log Search

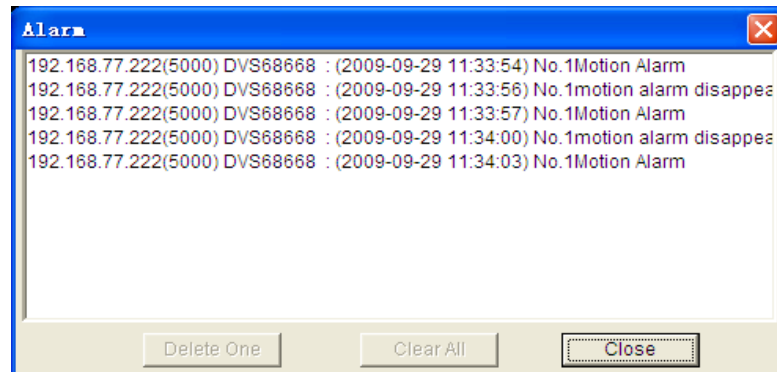
Date	Time	User	Content
2011-04-26	09:18:52	admin	admin Login
2011-04-26	09:19:30	admin	admin Login
2011-04-26	09:27:20	admin	admin Login
2011-04-26	09:27:27	admin	Quit
2011-04-26	09:27:48	admin	admin 登录
2011-04-26	09:29:15	admin	admin 登录
2011-04-26	09:29:22	admin	退出系统
2011-04-26	09:29:42	admin	admin Login

Choose time range of inquiry at first, then choose the type (Operation log, alarm log), then click [\[Inquiry\]](#) button, the log of the corresponding time will be displayed in the list.

Alarm Information & Emergency Control

When DVS has alarm inputting, system will determine whether or not to display the alarm message and alarm type according to the “alarm settings” in “local settings”.

See below picture for the first type of alarm window:



[Clear] Delete all alarm messages in the list of “Alarm message”.

See below picture for the second type of alarm window:



Only after NVS Center System log in DVS, can all different kinds of warning information be sent to the control center of NVS Center.

[Emergency Control]: DVS output control switch takes effect after this option is checked.

Start/Stop front peripheral connected to DVS through **[Output Control 1]** or **[Output Control 2]** to achieve the objective of emergency control (Such as Light, Entrance Guard).

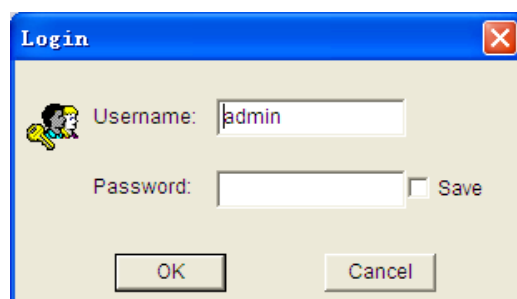
Video can be previewed real-time and emergency control can be implemented by double-click certain row of the alarm information list.

[Delete One]: Delete the warning information selected.

[Clear All]: Delete all information in the list.

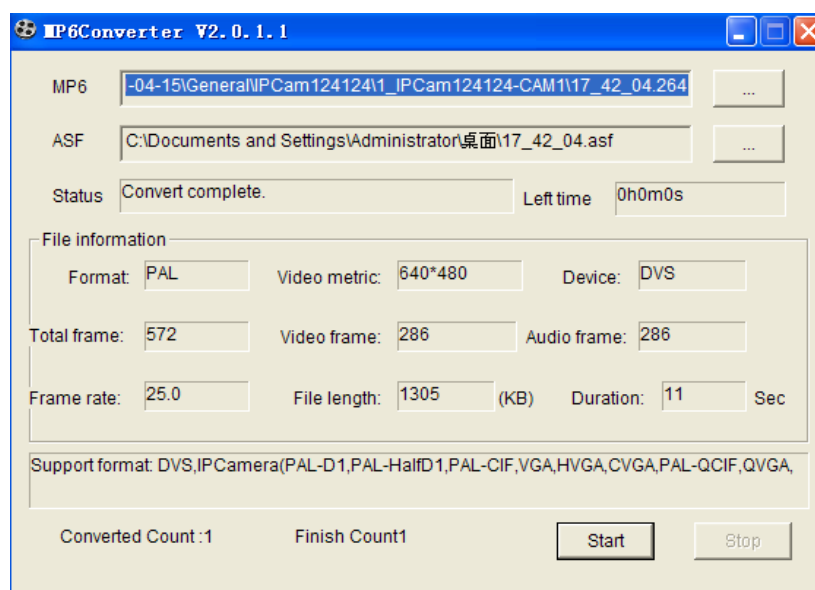
Lock

Click [Lock] icon , system will be locked up, you will be asked to input user's name and password, you cannot do any operation until the user's name and password are correctly entered.



MP6Converter

Run "MP6Converter", below page will pop up:

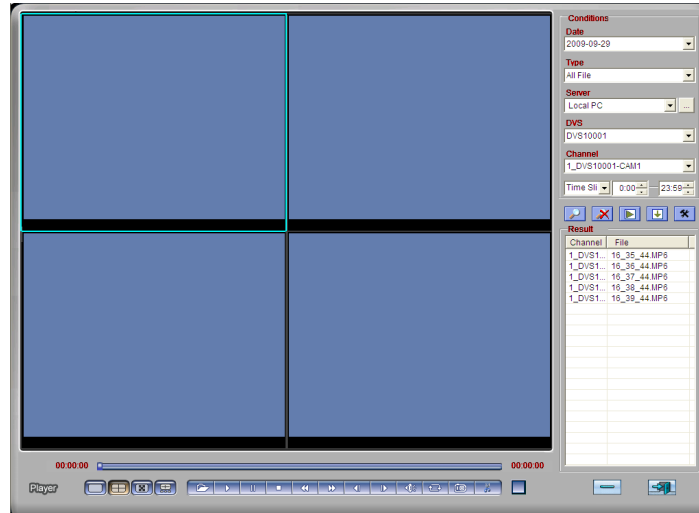


Operation of NVS Center

ASF is a media player customized by Microsoft.MP6Converter can convert the record files of IP camera and video server in MP6 format into files in ASF format so that they can be played on Microsoft Media player.

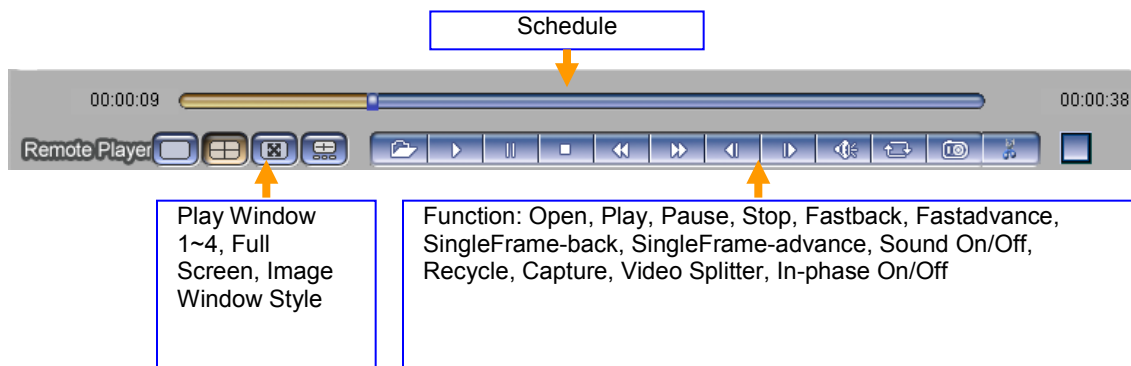
Record Searching/Play-back

Click [Searching Playback] button , the “searching playback interface” appears as below:



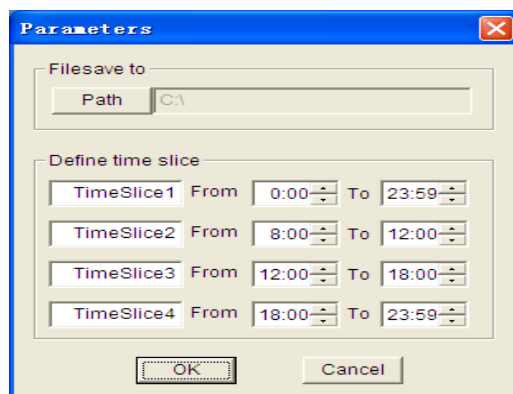
In this interface, you can search record files and images snapped:

Multi-screen can be selected to play at the same time, when there are several record files in the list; the records will be played in order until all files are played.



[Video Splitter]: click “video splitter” button  to start to split video that is playing, click it again and save the file, then the video can only be played via “Open With”.

[Set inquiry parameter]: click , the interface will pop up as follow:

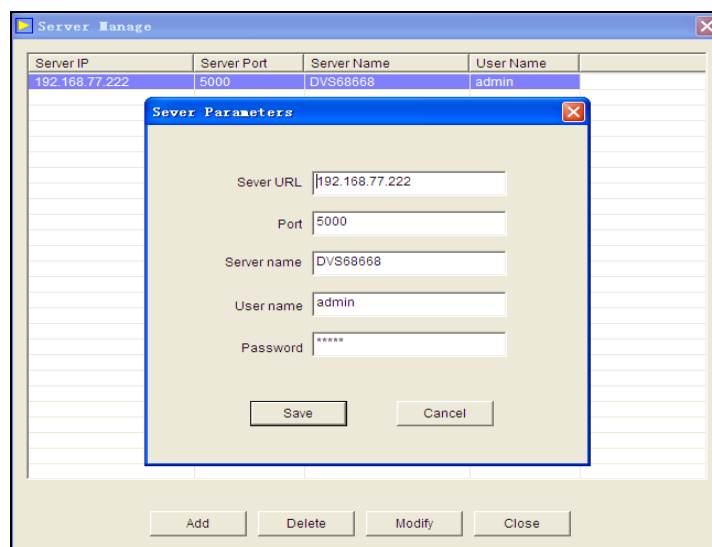


[Downloaded files storage directory]: The full path of file storage is: User Specified Directory\Record Date\DVS Address_DVS Name\DVS Channel\

[Define the time range of inquiry]: Users can define name and duration of the time range.

[Server]: click , the parameter settings window will pop up as follow:

By using remote playback server, you can search and download record files, if there is no server address you want in the server address list, please click , then will pop up a window as follow:



You can add, modify, delete server address, it is necessary to input "Server address" and "Port", "Server name" can be blank, username and password are the same as login the device's username and password.

Download Record Files

Select a record file in the list, right click it will pop up the menu as follow:



Click [Save As], the downloaded file will be stored under the directory you selected, if you want to inquiry downloaded file's information, please click , and will pop up a window as follow, you can pause downloading file.

Operation of NVS Center

Set DVS Parameters

System | Network | User | Audio | Video | Motion Alarm | Video Lose Alarm | Sensor Alarm | Net Failure Alarm | Storage

Device clock time: 2009-09-25 15:16:53 ☐ Synchronize with PC

DVS

Device name: NVS66149 If standard changed, device will auto restart!

Port num: 1

Standard: PAL

ID: 66149

Version No: 2.2.1.5

Upgrade file

Type: Application(*.uke)

Set Device Parameter

Click [\[Device Setup\]](#) icon  , or right click on the image window, select [\[Device Setup\]](#), an interface will pop up as follow:

Set Device Parameters

System | Network | User | Audio | Video | Motion Alarm | Sensor Alarm | Net Failure Alarm | Storage Device | Timer

Device clock time: 2011-04-18 15:59:10 ☐ Synchronize with PC

System

Device name: IPCam314319 If standard changed, device will auto restart!

Port num: 1

Standard: PAL

ID: 314319

Version No: 2.3.0.5.56.2

Upgrade file

Set Device System Parameters

See below for “Set Device System Parameters” interface:

The screenshot shows the 'Set Device Parameters' window with the 'System' tab selected. The left sidebar contains buttons for System, Video Settings, Audio Settings, Network Settings, Storage Settings, Alarm Settings, and COM Settings. The main area is divided into sections: 'Device clock time' with a date/time picker and a 'Synchronize with PC' checkbox; 'System' parameters including 'Device name' (IPCam356288), 'Port num' (1), 'Standard' (PAL), 'ID' (356288), and 'Version No' (2.3.0.3.0.0); an 'Upgrade file' section with a 'File' button and an 'Upgrade' button; and 'Restore default' and 'Reboot Device' buttons at the bottom.

System parameters

The Interface of set system parameters shown as below:

This is a duplicate of the screenshot above, showing the 'Set Device Parameters' window with the 'System' tab selected. It displays the same configuration options for device clock time, system parameters, upgrade file, and control buttons.

[Device Clock time]: set date and time for DVS, click “synchronize with PC” to synchronize the date and time of DVS with those of the PC.

[Device name]: Set name and format for DVS, view channels, device ID, and software edition of DVS.

[Standard]: provides PAL and NTSC systems, see below parameters:

[Upgrade file]: Click “Review” button, and select correct file of upgrade (kernel file, suffix.uot), click **[upgrade]**, then you can upgrade your system, the completion rate will be displayed during this process. After finished, DVS will restart automatically. Re-log in device, enter into system settings page, check to see whether the kernel edition is the upgraded edition. For example: kernel edition of the current DVS is (V2.3.0.3), the latest edition

Operation of NVS Center

obtained from supplier is (V2.3.0.4), and then the kernel edition after upgrade should be V2.3.0.4.



Don't cut off the power and internet connection when upgrading.

[Reset]: All DVS parameters (including network parameters) will be recovered as factory setting values.

[Restart DVS]: Click this button to restart DVS.

[DEBUG]: Enable or disable DVS debugging information for factory debugging.

Set user parameters

The interface of user management shown as below:

You can set three users for every DVS, one is Administrator, and the others are general users. The administrator can set Parameters for the DVS, but others can not set them.

Default Administrator Name: **admin** Password: **admin**

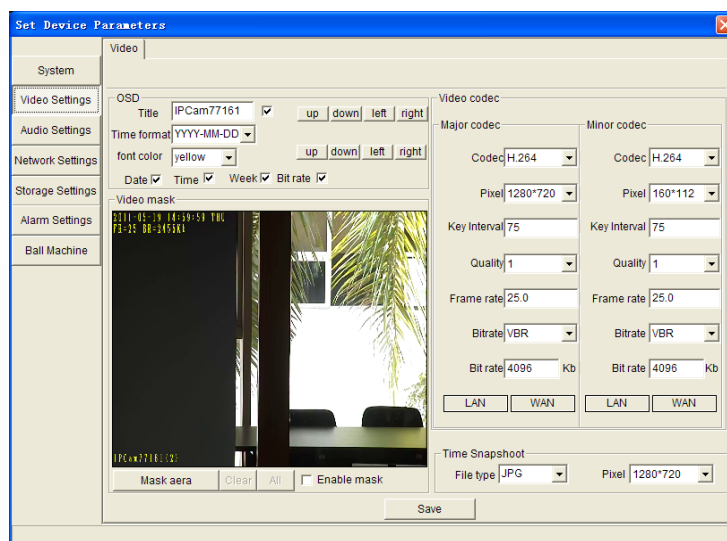
Default General User's Name: **user1** Password: **user1**

Default General User's Name: **user2** Password: **user2**

Note: User name and password are case sensitive.

Video settings

The interface of video settings shown as below:



Set the video parameters of every channel here: Name (title), caption overwrite, coding algorithm, definition, the frame interval, image quality, frame rate, bitrate control, bitrate, set image mask, etc.

[Title]: set the name of DVS to be displayed on the bottom left of the screen.

[OSD]: display or not to display name, date, time, week and bitrate of DVS.

[Video Codec]: H.264 and MJPEG.H.264 video compression coding standard improves coding algorithm on the bases of previous standard, making it highly effective.

[Pixel]: Set the Pixel of images here (depending on the specific model).

[Key Interval]: adjustable between 5~200. Smaller I frame interval means higher image bitrate and better image quality. It is recommended to set the I frame interval as above 25.

[Quality]: under CBR setting: set the bitrate range via "Image Quality", 1 means controlled by the software.

Bitrate range, 2~6 means corresponding bitrate range is $\pm 10\% \sim \pm 50\%$

Under VBR setting: set image quality via "Image Quality", smaller value of image quality means better quality and higher bitrate, but the bitrate will not exceed its set value.

[Frame Rate]: set encoding frame rate per second. Under poor network condition, frame rate can be reduced to control encoding bitrate to make motion images flow more smoothly.

[Bitrate]: CBR and VBR are optional. CBR adopts constant encoding bitrate, VBR adopts variable encoding bitrate.

[LAN]: I frame interval: 100, frame rate: 25, bitrate: VBR, 2048kbps, image quality:2

[WAN]: I frame interval: 25, frame rate: 5, bitrate: CBR, 384kbps, image quality:4

[Video Masking On/Off]: enable or disable video masking.

[Mask Area]: left click and move cursor to set image masking area, an image can be entirely or partially masked, maximum 4 areas supported.

[All]: mask the whole image.

[Clear]: clear masked areas.

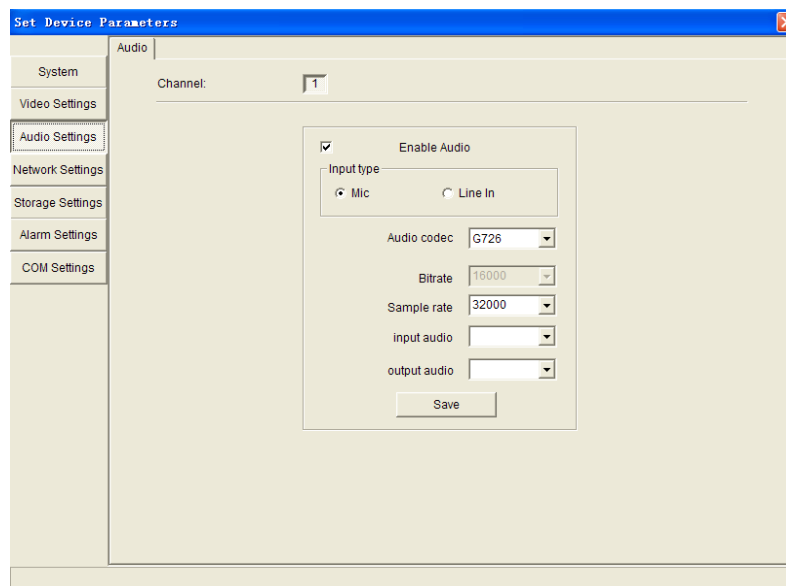
Operation of NVS Center

[Time snapshot]: supports only images of JPG format currently, definition is the same as set in [video definition].

After setting all the parameters, click [save] to make the parameters effective.

Audio settings

The interface of video settings shown as below:



[Enable Audio]: Set to enable or disable DVS audio. Sometimes audio is not needed, close audio input, code and transmission to save DSP resources and network resources.

[Input type]: IP Camera has two kinds of audio connections disposition, audio frequency input mode can be selected according to audio connection disposition:

1. MIC input
2. Line input with better audio quality due to audio frequency amplifying.

After setting all the parameters, click [save] to make the parameters effective.



The audio is disabled by default.

Set Device Network Parameters

See below picture for the interface of Set Base Network Parameters:

Basic parameters

[Narrow bandwidth Mode]: Open low-bandwidth transmitting mode, it applies to wireless and low-bandwidth network.

[DHCP] Dynamic IP address assignment from DHCP Server to DVS.

[IP address]: Set IP of the DVS device, which cannot be the same with the IP address of other DVS or PC on the network. Or it can be assigned by network administrator.

[Subnet Mask]: default as 255.255.255.0.

[Default Gateway]: set the gateway IP of DVS.

[MAC address]: MAC address is the hardware address of network, don't modify it if not necessary.

[Data Port No.]: Data Port provided by Video server, default value is 5000, when the value of data port is altered; you need to input corresponding port value in the interface to log in.

[HTTP Port No.]: default value is 80, when the value is altered, input IP address in IE browser to visit, the format is "http://IP address: port number".

[Multicast address]: send the IP address of multicast data. The range is 224.0.0.0~239.255.255.255.

[Multicast port No.]: default as 5000.

[DNS IP]: Domain Name Server Address, consult local ISP to get it, For example: In Shenzhen: DNS address is 202.96.134.133.

[Enable manage Center mode]: when device mode is "actively connecting center", the address and port number of the center need to be set correctly.

[Extended Parameters]:

DDNS

See below for the setting page of DDNS:

Other Parameters

DDNS | PPPOE | NTP | UPNP | Email | VPN | IP Ma

Enable DDNS ☒

DDNS Provider 3322.org

DDNS server URL www.3322.org

Domain name digitaltest.3322.org
(Such as: DVS1.mvddns.net)

DDNS regName luoyangtest

DDNS password *****

DDNS server port 30000

HTTP port map No. 80

Data port map No. 5000

update time interval 30 minute

Save

Bind the device with a fixed domain name by DNNS setting so that visiting to the device can be realized no matter how the public IP changes.

Setting steps:

Step 1: Log in DNNS server (e.g. <http://www.mvddns.net>), register user account and password:

Step 2: Select DDNS service provider, e.g. 3322.org.

Step 3: Fill in DDNS server address, e.g. www.3322.org.

Step 4: Fill in the domain name applied on DDNS server, e.g. digitaltest.3322.org

Step 5: Fill in the registration name to log into DDNS server;

Step 6: Fill in the registration password to log into DDNS server;

Step 7: Fill in the port of DDNS server, default value is 30000 (users are recommended not to change it);

Step 8: Fill in the port number of public network data after mapping, the default port is 5000. If several storage video servers are connected to one router, different data ports need to be specified for each device, and port mapping needs to be done for every specified port.

Step 9: Fill in the port number of public network web after mapping, the default port is 80. If several IP cameras are connected to one router, different web ports need to be specified for each device, and port mapping needs to be done for every specified port.

After setting all the parameters, click [\[save\]](#) and restart to make the parameters effective.

PPPOE

See below for the setting page:

The screenshot shows the 'Other Parameters' configuration window with the 'PPPOE' tab selected. The window has a title bar 'Other Parameters' and a tab bar with 'DDNS', 'PPPOE', 'NTP', 'UPNP', 'Email', 'VPN', and 'IP Ma'. The main content area includes:

- An unchecked checkbox labeled 'Enable PPOE'.
- A text field labeled 'PPPOE IP' with the value '0 . 0 . 0 . 0'.
- A text field labeled 'Account'.
- A text field labeled 'Password'.
- A text field labeled 'Online time' with the value '0-0:0:0'.
- A 'Save' button at the bottom.

[Enable PPPOE]: enable or disable PPPOE dial-up function.

[PPPOE IP]: after successful setting of device dial-up, it will display the WAN IP Address.

[Account]: ADSL dial-up account, obtain from the IP service provider.

[PPPOE password]: ADSL dial-up password, obtain from the IP service provider.

[Online time]: Start timing after dial-up to see the online duration after successful dial-up.

After setting all the parameters, click [save] to make the parameters effective.

NTP

See below for the setting page:

The screenshot shows the 'Other Parameters' configuration window with the 'NTP' tab selected. The window has a title bar 'Other Parameters' and a tab bar with 'DDNS', 'PPPOE', 'NTP', 'UPNP', 'Email', 'VPN', and 'IP Ma'. The main content area includes:

- An unchecked checkbox labeled 'Enable NTP'.
- A dropdown menu labeled 'Time zone' with the selected value '(GMT+08:00)Beijing, Hongkong, Singapore, Taipei'.
- A text field labeled 'NTP server' with the value 'clock.isc.org'.
- A 'Save' button at the bottom.

When starting NTP function, DVS will correct the DVS system clock on the NTP server regularly according to the setting.

UPNP

See below for the setting page:

Operation of NVS Center

Other Parameters

DDNS | PPPOE | NTP | **UPNP** | Email | VPN | IP Ma ◀ ▶

☐ Enable UPNP

UPNP mode: Designate

UPNP network card: Lineate

UPNP host: 0 . 0 . 0 . 0

Data port map No.: 5000

HTTP port map No.: 80

Data map status: 0

HTTP map status: 0

Save

Auto mapping of port, when there is server with UPNP function in the LAN, server will map the port to WAN automatically upon starting of this function.

[Enable UPNP]: Enable or disable UPNP function.

[UPNP Mode]: Specified mode and auto mode:

Specified mode means to specify data mapping port and web mapping port to server.

Auto mode means data mapping port and web mapping port are set up by server.

[UPNP NIC]: The type of NIC connecting UPNP server.

[UPNP server]: Gateway address of IP server with UPNP function.

Email

See below for the setting page:

Other Parameters

DDNS | PPPOE | NTP | UPNP | **Email** | VPN | IP Ma ◀ ▶

SMTP server:

MAIL from:

MAIL to:

CC to:

SMTP username:

SMTP password:

MAIL title: Alarm Message

SMTP Port: 25

SSL ☐

Save

To set the mailbox addresses and parameters of alarm mails and WAN IP mails.

[SMTP server]: the address of servers that send the mails, the address format of mail servers varies from provider to provider, e.g. the SMTP server of 163 mailbox is smtp.163.com.

[Mail from]: Mailbox that sends mails.

[Mail to]: Mailbox that receives mails.

[Mail cc]: Mailbox in the cc loop.

[SMTP username]: The login user name of the mailbox that sends mails.

[SMTP password]: The login password of the mailbox that sends mails.

[Mail title]: Title of mails.

[SMTP Port]: Port of SMTP port, different mail server has different port.

VPN

See below for the setting page:

The screenshot shows the 'Other Parameters' configuration window with the 'VPN' tab selected. The interface includes a 'VPN ON-OFF' checkbox, input fields for 'VPN Server', 'VPN UserName', and 'VPN Password', a 'VPN IP' field with a default value of '0 . 0 . 0 . 0', and a 'VPN State' field showing 'VPN dial failure'. A 'Save' button is located at the bottom.

[VPN ON-OFF]: Enable or disable VPN function.

[VPN Server]: IP address or domain of VPN server.

[VPN UserName]: User registered in VPN server.

[VPN Password]: User password registered in VPN server.

[VPN IP]: Display IP after VPN dial-up success.

[VPN Status]: Display the status of dial-up.

IP Mail

The screenshot shows the 'Other Parameters' configuration window with the 'IP Mail' tab selected. The interface includes a 'Mail notifications' checkbox and a 'time interval' dropdown menu set to 'default'. A 'Save' button is located at the bottom.

[Mail notifications]: Check this switch to enable public IP mail notification function.

[Time interval]: Select the interval of public IP mail notifications.

After enable this function, when the device starts or detects public IP change, it will send notification mail to the mail address set in [mail setting].

FTP

See below for the FTP setting page:

Other Parameters

NTP | UPNP | Email | VPN | IP Mail | **FTP** | RTSP

Preferred server

Server address

Server port

Save path

User name

Password

Alternate server

Server address

Server port

Save path

User name

Password

Save

FTP server sends the record files and snapped images generated after alarm is triggered in FTP mode to specified FTP server, supports 2 FTP servers, when the preferred one goes wrong, system will switch to the alternate one.

[Server address]: the IP address or HTTP address of FTP server.

[Server port]: port of FTP server, the default port is 21.

[Server path]: path on remote FTP server, if the path doesn't exist or has not been filled in, the device will create a file folder under the root directory of FTP server.

[User name and password]: user name and password of FTP server.



Users must have the authority to write on the FTP server in order to upload record files and snapped images.

RTSP

See below for RTSP setting page:

Other Parameters

NTP | UPNP | Email | VPN | IP Mail | FTP | **RTSP**

RTSP On/Off ☐

RTPS mode **Passivity**

Enable Encryption ☐

packet Size

Port

Save

[Enable ON/Off]: Check RTSP switch to enable RTSP function.

[Enable encryption]: check encryption switch, you need the password then using VLC player connect camera.

Open: rtsp://ip/av0_0&user=admin&password=admin;

Close: rtsp://ip/av0_0[&user=admin&password=admin], " []" Optional content;

"av0_0 ",frist"0" shows channel:0,1,2,3, represent the channel :1,2,3,4;The second "0" shows preferred / alternate stream,0:preferred stream,1:alternate stream;

[RTSP Port]: Default port is 554.

With RTSP function enabled, users can review the audio and video streams in real time via players that supports standard RTSP protocol.

3G parameters

See below for 3G setting page:

work | DDNS | PPPOE | NTP | UPNP | Email | VPN | IP Mail | FTP | RTSP | **3G** | GPS

3G basic Information

3G Enabled ☐

Signal intensity **faintish**

3G Type **CDMA2000**

3G State **NO unlock**

sim State **SIM FAILED**

Server State **NO SRV**

Network mode **NO SRV**

SoftWareVer

HardWareVer

High Set

Tel No **#777** Local ip

APN Remote ip

UserName **card** para1

Password **card** para2

Type **None**

Dial Command

dial No. control ☐

Dial Time 1 Set ☐ 0:00 - 0:00

Dial Time 2 Set ☐ 0:00 - 0:00

Dial Time 3 Set ☐ 0:00 - 0:00

Dial Time 4 Set ☐ 0:00 - 0:00

mensal astrict Time **0** (hour,0 hour no time astrict)

Free Time Consume Date

Consume Time **000 hours 0 minutes**

Save

3G basic information

[Enable 3G]: Select this option will enable 3G function.

[Signal Intensity]: Display the 3 G network signal's intensity.

[3G Type]: There are three types: CDMA2000, WCDMA, TD-SCDMA.

[3G Status]: Display the status of 3G dial-up (e.g. Dial-up success!).

[SIM Card Status]: Display the status of SIM Card (e.g. SIM ok).

[Service Status]: Display the status of service.

[Network Mode]: Display the status of network mode.

[Software Version]: Display the status of software version.

[Hardware Version]: Display the status of hardware version.

High set

[Tel No]: SIM card number for 3G dial-up.

[APN]: Establish to pass which mode to connect into network(e.g. CMWAP).

[UserName]: Username of SIM card.

[Password]: Password of SIM card.

[Type]: There are three kinds of authentication you can choose: None, PAP, CHAP.

Dial command

[Time1—4]: You can set four periods of time during which can dial-up, and the four periods of time can be overlaid.

[Mensal astrict Time]: Set this option, the time of dial-up can be limited every month.

[Free time consume date]: Set the date then use time will be erased next month.

[Consume time]: Display how long does it dial-up.

After you set these parameters, please click [\[Save\]](#) to make them valid.



You needn't modify the parameters below type, just keep it as default.

GPS parameters

See below for 3G setting page:

POE	NTP	UPNP	Email	VPN	IP Mail	FTP	RTSP	3G	GPS
-----	-----	------	-------	-----	---------	-----	------	----	-----

GPS Enabled ☐

GPS State

GPS Captions superimposition ☐

GPS Server URL

GPS Server Port

Tel Number

Reporting Time Sec.

[GPS Enabled]: Enable or disable the function of GPS.

[GPS State]: Display the connected status of GPS.

[GPS captions superimposition]: Set the captions of GPS display information.

[GPS server URL]: Set the GPS server's URL.

[GPS server port]: Set the GPS server's port.

[Tel Number]: Fill in the number of your phone which open the GPS function.

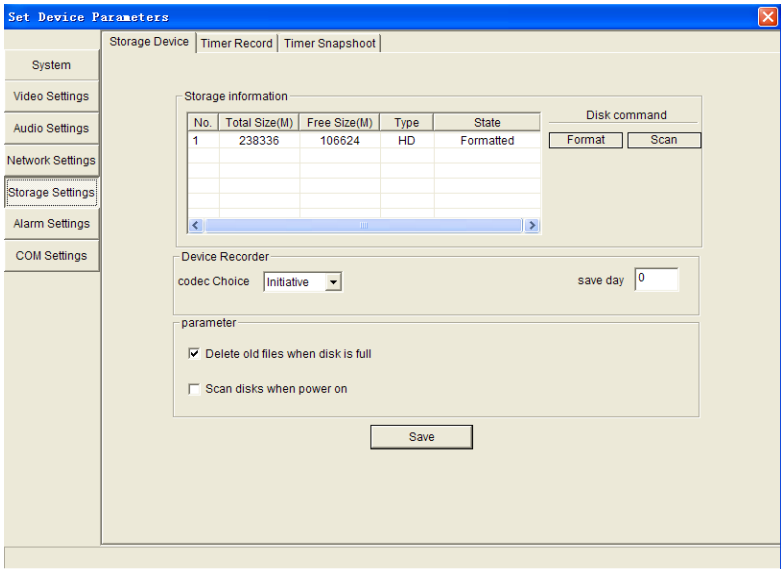
[Reporting Time]: Set the interval of device reports GPS information to server.

After you set these parameters, please click [\[Save\]](#) to make them valid.

Storage settings

Storage device parameters:

See the interface of storage device parameters as below:



[Storage information]: View information of had disk or SD card here, including total capacity, free capacity, type and formatting status.

[Disk operation]: Check whether the device has storage medium and format the medium.

[Auto delete old files when storage device gets full]: Choose to auto delete old files or not when storage device gets full. Auto delete old files: first delete the files of the earliest date, if the space is still not enough, then delete the files of the earliest date but one, then go on like this if necessary. If the record files are taken on the current date, then first delete the files of the earliest hour. But files of the current hour cannot be deleted, if the disk gets full in one hour, the device will stop recording and snapping. After the one-hour session ends, system will delete the files of the hour and continue to record and snapping.

[Scan disk when starting device]: Choose to scan disk or not when starting the device.



- Hot-plugging is not recommended for SD card, compulsory hot-plugging may damage the SD card, causing data loss or abnormal operation.
- As disk formatting needs to take a long time, don't stop power supply during the process.
- Ext2 file is used to format system by default.
- Storage Video Server doesn't support disk formatted as logical partitions or multiple partitions, so it is recommended to format the disk as only one main partition.

Timer record parameters:

See the interface of timer record parameters as below:

[Record parameters]

[Stream selection]: set record stream for the device, preferred stream and alternate stream are selectable.

[Record files packing interval]: set packing intervals for each segment of record file when recording. 1 means files will be packed every 1 minute.

[Record Schedule]: set the period of scheduled recording, any period of each day can be set up.

[File save mode]: files can be saved via FTP uploading or E-mail sending.

After setting all the parameters, click [save] to make the parameters effective.

Timer snapshot parameters:

See the interface of timer snapshot parameters as below:

[Snap interval]: set the interval for DVS scheduled snap, minimum interval is 1 second.

[Schedule Snap]: set the period of scheduled snap, any period of each day can be set up.

[File save mode]: images can be saved via E-mail sending or FTP uploading.

After setting all the parameters, click [save] to make the parameters effective.

Set Alarm Parameters

Motion alarm parameters:

See below picture for the interface of motion alarm parameters:

The screenshot shows the 'Motion Alarm' configuration window. It has tabs for 'Motion Alarm', 'Video Lose Alarm', 'Sensor Alarm', and 'Net Failure Alarm'. The 'Motion Alarm' tab is selected. The interface includes a 'Weekly schedule' section with a table for setting time segments for each day of the week. There is a 'Motion area' preview showing a street scene. Below the preview are settings for 'Alarm output', 'Alarm delay', 'Email', 'Motion area', 'Enable detect', and 'Sensitivity'. At the bottom, there are sections for 'Alarm linkage on PC' and 'Record' settings, including 'Record time', 'File save mode', 'Snapshot', 'Snap num', 'Snap interval', and 'File save'. A 'Save' button is at the bottom right.

[Weekly schedule]: set the period of motion detection. Any period in each day can be set up.

[Alarm output]: When alarm is triggered, the built-in relays will be driven to output alarm.

[Alarm Delay] Set the duration of the linkage alarm output after being triggered (in seconds), the range of the duration is 0~86400s.0 means that there is no limit for alarm output.

[E-mail]: when alarm is triggered, E-mails can be sent to specified mail address (can be set in “network parameters”).

[Motion area]: left click and drive the mouse to set the surveillance areas (4 areas at most).

[Clear]: clear surveillance areas.

[All]: the entire Video area is the surveillance area.

[Enable detect]: motion detection switch on or off.

[Sensitivity]: set the sensitivity of motion detection, its range is 1~5, greater value means higher sensitivity.

[Alarm linkage on PC]: after alarm is triggered, the PC will start alarm recording.

[Record]: after alarm is triggered, the device will start recording. Recording duration is settable and the files can be saved via ftp uploading or Email sending.

[Snapshot]: after alarm is triggered, the device will start snapping. Snapping duration and number of images are settable and the files can be saved via ftp uploading or Email sending.



The snapping interval can be decimal, e.g. 0.5s, 1.5s.

After setting all the parameters, click **[save]** to make the parameters effective.

Video lose alarm parameters:

See below picture for the interface of video lose alarm parameters:

Motion Alarm
Video Lose Alarm
Sensor Alarm
Net Failure Alarm

Channel: 1

☐ Enable detect

Alarm linkage on PC

Channel	Record	Preset No.	Preset name
1	☐	0	
2	☐	0	
3	☐	0	
4	☐	0	

Email

☐ Email

Alarm output

☐ 1 ☐ 2 ☐ 3 ☐ 4 Alarm delay 10 s

Snapshot

☐ 1 ☐ 2 ☐ 3 ☐ 4 Snap num 1 Snap interval 1 s File save mode ☐ Ftp ☐ Email

Snapshot interval can be float, e.g. 0.5, 1.5 ..

Record

☐ 1 ☐ 2 ☐ 3 ☐ 4 Record time 60 s File save mode ☐ Ftp ☐ Email

Save

[Enable detect]: Enable or disable video lose alarm.

[Alarm linkage on PC]: After alarm is triggered, the PC will start alarm recording.

[E-mail]: when alarm is triggered, E-mails can be sent to specified mail address (can be set in "network parameters").

[Alarm output]: When alarm is triggered, the built-in relays will be driven to output alarm.

[Snapshot]: after alarm is triggered, the device will start snapping. Snapping duration and number of images are settable and the files can be saved via ftp uploading or Email sending.

[Record]: after alarm is triggered, the device will start recording. Recording duration is settable and the files can be saved via ftp uploading or Email sending.

After setting all the parameters, click [save] to make the parameters effective.



This function is only for DVS, IPC doesn't have it.

Sensor alarm parameters:

See the interface of sensor alarm parameters as below:

Operation of NVS Center

The screenshot shows the 'Sensor Alarm' configuration window. At the top, there are tabs for 'Motion Alarm', 'Video Lose Alarm', 'Sensor Alarm', and 'Net Failure Alarm'. Below the tabs is a 'Sensor select' section with four buttons labeled 1, 2, 3, and 4. The main configuration area is divided into several sections: 'Weekly schedule' with a table for setting alarm times for each day of the week (Sun-Sat) across two time segments; 'Parameter' with checkboxes for 'Enable detect' and a 'Sensor type' dropdown set to 'NO'; 'Email' with an 'Email' checkbox; 'Alarm output' with checkboxes for 1, 2, 3, and 4, and an 'Alarm delay' spinner set to 10 seconds; 'Alarm linkage on PC' with a table for linking channels to PC records and preset names; 'Record' with checkboxes for 1, 2, 3, and 4, a 'Record time' spinner set to 60 seconds, and 'File save mode' checkboxes for 'Ftp' and 'Email'; 'Snapshot' with checkboxes for 1, 2, 3, and 4, a 'Snap num' spinner set to 1, a 'Snap interval' spinner set to 1 second, and 'File save mode' checkboxes for 'Ftp' and 'Email'; and a 'Copy to other channels' checkbox. A 'Save' button is at the bottom right.

[Weekly schedule]: set the period of sensor alarm. Any period in each day can be set up.

[Enable detect]: enable or disable sensor detection.

[Sensor type]: NO and NC mode.

[E-mail]: when alarm is triggered, E-mails can be sent to specified mail address (can be set in "network parameters").

[Alarm output]: When alarm is triggered, the built-in relays will be driven to output alarm.

[Alarm Delay] Set the duration of the linkage alarm output after being triggered (in seconds), the range of the duration is 0~86400s. 0 means that there is no limit for alarm output.

[Alarm linkage on PC]: after alarm is triggered, the PC will start alarm recording.

[Record]: after alarm is triggered, the device will start recording. Recording duration is settable and the files can be saved via ftp uploading or Email sending.

[Snapshot]: after alarm is triggered, the device will start snapping images. Snapping duration and number of images are settable and the files can be saved via ftp uploading or Email sending.

[Copy to other channels]: copy the parameters of current sensor to other sensors.

After setting all the parameters, click [save] to make the parameters effective.

Network failure alarm parameters:

See the interface of network failure alarm parameters as below:

The screenshot shows the 'Net Failure Alarm' configuration page. At the top, there are four tabs: 'Motion Alarm', 'Video Lose Alarm', 'Sensor Alarm', and 'Net Failure Alarm'. Below the tabs, there is a checkbox for 'Enable detect'. The 'Alarm output' section includes four checkboxes for relays 1, 2, 3, and 4, and an 'Alarm delay' set to 10 seconds. An 'Email' checkbox is also present. The 'Snapshot' section has checkboxes for snapshots 1, 2, 3, and 4, a 'Snap num' set to 1, a 'Snap interval' set to 1 second, and 'File save mode' options for 'Ftp' and 'Email'. A note states 'Snapshot interval can be floa'. The 'Record' section has checkboxes for recording 1, 2, 3, and 4, a 'Record' duration set to 60 seconds, and 'File save mode' options for 'Ftp' and 'Email'. A 'Save' button is located at the bottom center.

[Enable detect]: open or close network failure detection.

[Alarm output]: When alarm is triggered, the built-in relays will be driven to output alarm.

[Alarm Delay] Set the duration of the linkage alarm output after being triggered (in seconds), the range of the duration is 0~86400s.0 means that there is no limit for alarm output.

[E-mail]: when alarm is triggered, E-mails can be sent to specified mail address (can be set in "network parameters").

[Snapshot]: after alarm is triggered, the device will start snapping images. Snapping duration and number of images are settable and the files can be saved via ftp uploading or Email sending.

[Record]: after alarm is triggered, the device will start recording. Recording duration is settable and the files can be saved via ftp uploading.

After setting all the parameters, click [save] to make the parameters effective.

Set Terminal Parameters

See the interface of terminal parameters as below:

Operation of NVS Center

The screenshot shows a configuration window titled 'Terminal' with two main sections: 'COM Settings' and 'Embedded PTZ protocol'.
In the 'COM Settings' section, the following options are visible:
- COM: RS485 (dropdown)
- Bit rate: 9600 (dropdown)
- Data bits: 8 (dropdown)
- Stop bits: 1 (dropdown)
- Check bit: None (dropdown)
- Flow ctrl: None (dropdown)
A 'Save' button is located at the bottom of this section.
In the 'Embedded PTZ protocol' section, the following options are visible:
- Protocol: Protocol 1 (dropdown)
- A 'File' input field and a 'Download' button are present.
Below this is the 'PTZ protocol settings' section:
- Channel: 1 (dropdown)
- PTZ address: 1 (spin box)
- Embedded protocol: STD_Speed.COD (dropdown)
A 'Save' button is located at the bottom of this section.

[\[Serial port settings\]](#): When DVS is connected to RS485 (or RS232) communication or control device (e.g. PTZ decoder, dome camera), the parameters of RS485 (or RS232) need to be set according to the settings of the communication control device (address, protocol, baud rate), and the corresponding protocol need to be downloaded.



Only when the parameters and protocol are correctly set that the control of add-on communication control device can be implemented.

[\[Embedded PTZ protocol\]](#)

Decoder address: 1~255.

Embedded protocol: echo the embedded protocol name of current DVS.

PTZ decoder protocol files uploading: to upload the decoder/dome camera communication protocol selected by users. The system supports hundreds of decoder/dome camera communication protocol; it can also be defined by users according to the standard format of protocol.

After setting all the parameters, click [\[save\]](#) to make the parameters effective

Appendix 1 Default Parameters of Encoder

The default network ports of encoders are:

TCP	80	Web port
	5000	Communication port, audio/video data transmission port, talkback data transmission port
UDP	5000	Audio/video data transmission port
Multi-cast port	Multicast original port + channel number	

Default network parameters

Cabled Network:	
IP Address: 192.168.55.160	Data Port: 5000
Subnet mask: 255.255.255.0	Web Port: 80
Gateway: 192.168.55.1	DHCP: Off
Wireless Network:	
IP Address: 192.168.1.160	Frequency: Auto
Gateway: 192.168.1.1	Mode: Auto
Subnet mask: 255.255.255.0	

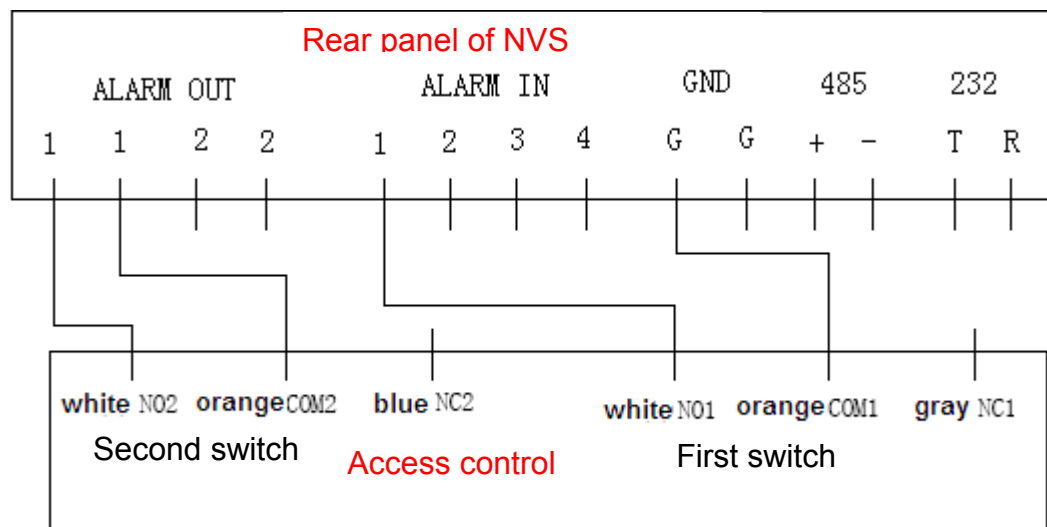
Default user information

Default Administrator Name: admin	Password: admin
Default General User's Name: user1	Password: user1
Default General User's Name: user2	Password: user2
Note: User name and password are case sensitive.	

Appendix 2 Access Control used in NVS Center

Principle

1. Access control work situation:
 - 1) Use the correct card, the first switch action.
 - 2) Input the correct password, the second switch action.
2. Wiring instruction of access controller and NVS.
 - 1) Set the first switch of access controller “N0” as NVS’s “alarm input 1”. Set the “output control 1” of NVS and the second switch of access control parallel connection
 - 2) The second switch of access controller control the action of gate.



Set parameters of NVS Center

1. Through [Windows Assign] to add the NVS (support the name of NVS is “NVS gate”) which is connected with access controller.
2. Through [Local parameter]->[Device description], define the NVS “alarm input 1” as “open the switch requirement” and define the NVS “output control 1” as “switch control”.

- Through [Device settings]->[Sensor Alarm], set the type of “alarm input 1” as “NO”, don't choose any options of alarm linkage.

Working process

- The switch will turn on when password is correct.
- After you login the NVS, it will pop up the interface as follow when the card is correct:

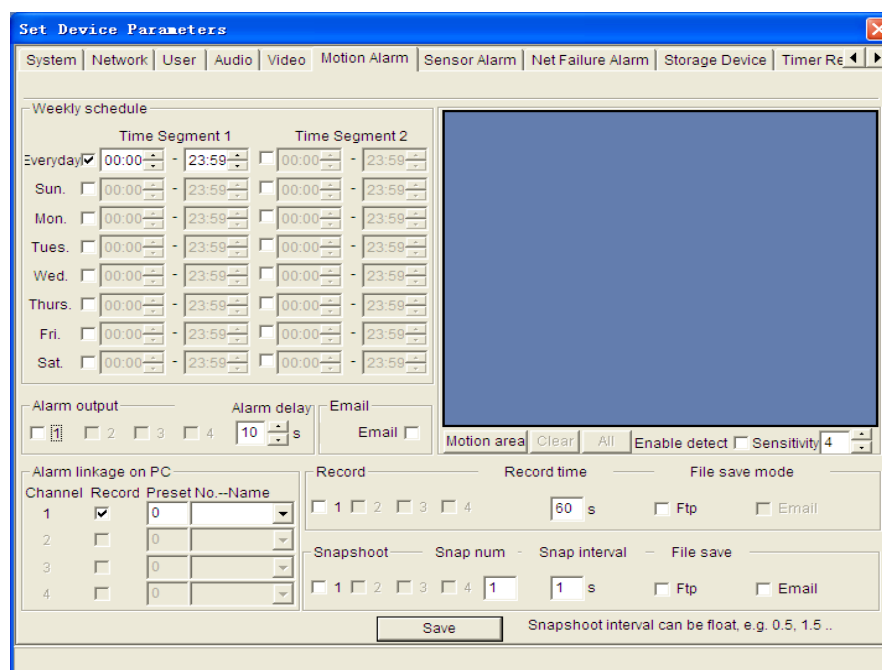


- Administrator can control the switch through click “control switch”.

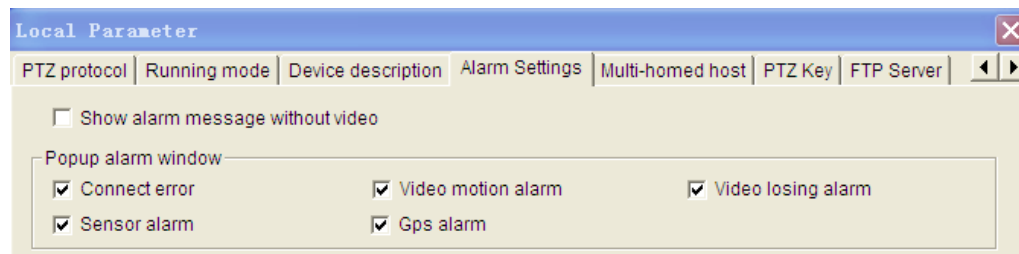
Appendix 3 FAQs

How to set linkage alarm between device and NVSCenter?

Solution: Login the device you want to set linkage alarm and you can set the parameters, then choose the type of alarm, see the interface as follow:



After you set the device's alarm parameters, click [\[Local settings\]](#) , and will pop up a window as follow:



You can choose event when it happened, there will be trigger the alarm event.



NVS Center will not give any alarm prompt of the device if you didn't choose alarm prompt event.

What are active connection mode and passive connection mode?

Active connection mode: The surveillance central actively searches for or manually adds DVS network information.

Passive connection mode: DVS actively register network information into surveillance central.



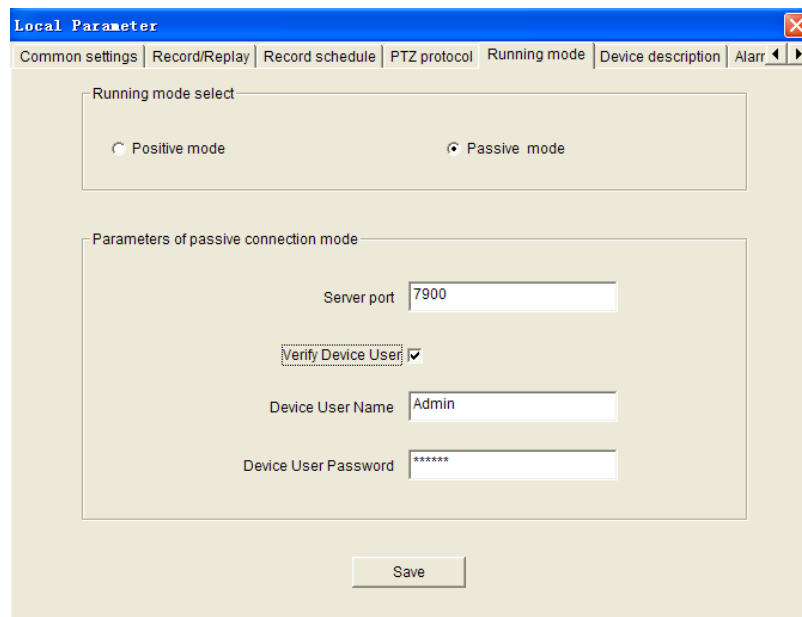
- When the device's default mode is passive connection, it means NVS Center set in active connection mode.
- When the device's default mode is active connection, it means NCS Center set in passive connection mode.

How to set the device's passive connection mode?

Firstly, you have to set the network parameters. On the network setting interface,(see it as follow), enable manage center mode; Secondly, input the manage center URL and port, after save it, the device will restart.

The screenshot shows the 'Set Device Parameters' window with the 'Network' tab selected. The 'Enable manage center mode' checkbox is checked. The 'Manage center URL' is set to 192.168.11.11 and the 'Manage center port' is set to 6666. Other network settings like IP address, subnet mask, and gateway are also visible.

After you set the device's network parameters, click [\[Local settings\]](#) , and will pop up the interface of local setting, choose [\[Running mode\]](#) as follow:



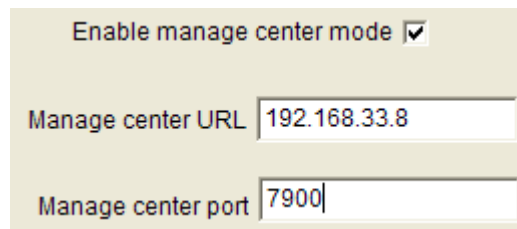
The screenshot shows the 'Local Parameter' window with the 'Running mode' tab selected. Under 'Running mode select', 'Passive mode' is chosen. The 'Parameters of passive connection mode' section contains the following fields: 'Server port' set to 7900, 'Verify Device User' checked, 'Device User Name' set to Admin, and 'Device User Password' masked with asterisks. A 'Save' button is located at the bottom of the window.

NVSCenter be set as passive connection mode, set the port, enable verify device user or not. After you change the connection mode, NVSCenter has to restart(The parameters information of the former mode will be deleted, before you change the mode, you'd better copy the file of ViewWnInfo under NVSCenter).

[\[Save\]](#) the parameters.

Enable snap when alarm, why doesn't it work?

Snap when alarm, when front-end happened alarm event, the device will send the snap images to manage center, so front-end device had to enable active connection mode, and input the right manage center URL, the interface is as follow:



The screenshot shows the 'Enable manage center mode' section with the checkbox checked. Below it are two input fields: 'Manage center URL' with the value 192.168.33.8 and 'Manage center port' with the value 7900.

[\[Save\]](#) the parameters.

The color of images is abnormal (green or other colors).

Solution: Sometimes DVS images cannot display properly for the difference between Graphics Cards, the images appears to be green or other colors, then you should run the program Config.exe to set the following parameters of display buffer: auto-detection, used display card memory, system memory and video width, then restart the program.

There is no sound while monitoring.

Possible Reason: No audio input connection

Solution: Check audio connection of the host

Possible Reason 2: The audio option of IP camera is off

Solution: Check audio parameter settings to see if you have opened the audio.

Search NVS can't find device.

Possible reason: SearchNVS software adopts multicast protocol to perform searching. But the firewall forbids multicast data packet.

Solution: Disable the firewall.

Image processing doesn't work properly

Possible Reason 1: system issue, DirectX function is disabled, which will cause slow display of images and abnormal color.

Possible Reason 2: hardware issue, graphics card doesn't support image acceleration and hardware zooming functions.(For hardware issue, the only solution is to replace graphics card)

Solution: install DirectX image drive, then Start→Run→input "DXDIAG"



Enable DirectDraw speedup, Direct3D speedup, AGP veins speedup in DirectX function. If they cannot be enabled, that means DirectX installation fails or hardware not supportive.



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